

United States Department of the Interior Bureau of Land Management

**Environmental Assessment
DOI-BLM-AZ-C010-2011-0040-EA**

September 6, 2011

Proposed UniSource and Mineral Park Power Facilities

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I. Introduction

A. Background

Mineral Park Inc. (MPI) recently installed a 45MW gas fired turbine generator and in order to use it they need Unisource Energy (UNSE) to install an isolation breaker site and appurtenant facilities. In order for MPI to have control at the isolation breaker site, a fiber optic line needs to be installed from the breaker to Mineral Park Mine. The fiber optic line would be underbuilt on an existing 13.2 kV line. This distribution line was built under the mine's plan of development but it does not have a Right-of-Way (ROW) authorization; therefore MPI has applied for a ROW for the distribution line. The BLM considered including access roads in the appropriate authorization, however these roads are used heavily for operating and maintaining other facilities associated with MPI's mining operation and are either authorized under MPI's existing or proposed mining plan of operations. UNSE also needs to remove an old transmission line and build a new transmission line. All of these activities are in the same general area and have similar types of impacts; therefore they will be analyzed under one environmental assessment.

B. Purpose and Need

Purpose: The purpose of the proposed action is to provide UNSE and MPI ROW authorizations on Bureau of Land Management (BLM) administered public land.

Need: The need for the proposed action is established by BLM's Responsibility under the Federal Land Policy and Management Act to respond to ROW applications submitted by the proponents to construct, operate, and maintain power lines and associated facilities on public lands administered by the BLM Kingman Field Office (KFO).

C. Decisions to be made

The BLM will determine whether or not to grant/amend the ROW's applied for and what stipulations would be attached.

D. Conformance with BLM Land Use Plan(s)

This proposed action is in conformance with the Kingman Resource Management Plan (KRMP) approved March 1995. The following KRMP Decisions apply:

- CL01 Protect the scientific information potential of sites, enhance the public use values of sites and manage sites for conservation. (Page 74)
- LR13a All other minor rights-of-way would be evaluated through the environmental review process and granted or rejected on a case by case basis. Existing rights-of-way would be used when possible to minimize surface disturbance. (Page 21)
- TE03 BLM will manage for conservation of candidate and BLM-sensitive species and their habitats. BLM will ensure that actions authorized will not contribute to the need to list any of these species as threatened or endangered. (Page 29)
- VR01 Designate and manage visual resources according to the Visual Resource Management Classes as shown on Map 19, page 81 and Table 16, page 138.

II. DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

A. Proposed Action

Detailed descriptions of the proposed actions are described in the Plans of Development (POD) attached as Appendix 1.

In summary UNSE has applied for the following ROW actions (Figure 1):

1. Amend ROW AZAR-33296 to include 1.93 miles of new 20.8 kV power line, 7,320 ft. of which would be under-built on UNS's existing 69 kV power line authorized under AZAR-33296. Refer to Appendix 2, Map 1.
 - a. The ROW area for the portion of 20.8 kV power line which would not be under-built would be 25 feet wide and 2845 feet long and would consist of 1.63 acres on public land.
 - b. No New Roads would be constructed and an existing county road would be used to layout and then access the pole line.
 - c. Vegetation at pole location would only be removed if necessary and harvest protected plant species would be avoided or transplanted as necessary.
 - d. Cultural and biological clearance completed on July 29, 2011.
2. Partial relinquishment of 3.02 miles of ROW AZPHZ-034352 containing approximately 36.664 acres located in Township 23 north Range 18 West, Sections 10, 15, 22, 23, and 26. (This action would not be implemented until after Unisource has constructed other infrastructure to supply the current electrical demand. These actions are estimated to occur in or around 2015.) Refer to Appendix 2, Map 2.
 - a. Existing roads would be used where possible to remove hardware and poles. Where No roads are present an ATV would be used to drag the materials to the nearest existing road.
 - b. Disturbed areas would be raked/scarified to promote natural reclamation.
 - c. Off-road routes would be cleared for cultural and wildlife resources before decommissioning commences.
 - d. No work would be done until a notice to proceed is delivered to UniSource from the BLM.
3. Amend ROW AZAR-33296 to include an isolation breaker site to an existing 69 kV (Township 23N. range 18 W. section 26). Refer to Appendix 2, Map 3.
 - a. Approximately 80 X 120 ft. (0.220 acres) would be fenced with 7 ft. chain link and razor wire.
 - b. State harvest protected species would be avoided or transplanted as necessary.
4. Amend ROW AZAR-33296 to under build 2.04 miles of fiber optic cable on an existing 69kV line (Township 23 N range 18W sections 26, 34 and Township 22 N Range 18 W section 3). Refer to Appendix 2, Map 4.

Additionally MPI has applied for the following ROW actions:

5. A new ROW to authorize a fiber optic under build on existing 69kV and 13.2 kV lines (Township 23 N range 18W section 23, 24, 26 AZA 35723). Refer to Appendix 2, Map 5.

a. This line would cross 1.660 miles of public lands and the width of the proposed ROW is 12 feet. The area of the proposed ROW is 2.414 acres. Access roads already exist so no surface disturbance is anticipated. These roads also serve as maintenance roads for pipelines and other mine facilities, so these would not be included in Mineral Park's proposed ROWs. These have either been authorized by the existing Mining Plan of Operations (MPO) or are to be authorized under the MPO currently being processed.

6. A new ROW to authorize an existing 13.2 kV line. Refer to Appendix 2, Map 6.

a. The existing 13.2kV line was built on MPI's unpatented mining claim as part of their mining operations. This line crosses 2.944 miles of public lands and the width of the proposed ROW is 30 feet. The area of the proposed ROW is 10.707 acres. With the addition of the fiber optic line they have requested formal recognition of the line from BLM in the form of a ROW.

b. One pole on the existing 13.2kV line would be moved slightly to ensure that the fiber optic under build would meet height requirements over roads. A single new pole would also be added with regulators.

Total estimated new surface disturbance is 0.75 acres.

B. No Action Alternative: BLM would not approve the ROW actions.

III. RESOURCE/ ISSUE REVIEW:

The proposed action was considered and analyzed by an interdisciplinary team identified in the BLM KFO Project Scoping Meeting on August 2, 2010. Resources or issues of concern that are either not present in the project area or would not be impacted to a degree that requires detailed analysis will not be discussed here. Resources which could be impacted by the proposed action or alternatives are identified in the table below. A description of the present and potentially affected resources identified is provided following the table.

TABLE 1: PROJECT RESOURCE REVIEW			
Resources/Issues Considered	Not Present	Present and Not Affected	Present and Potentially Affected
Air Quality*		✓	
Areas of Critical Environmental Concern*	✓		
Climate Change	✓		
Cultural and Historic*	✓		
Environmental Justice* / Socioeconomics	✓		
Floodplains*	✓		
Grazing		✓	

TABLE 1: PROJECT RESOURCE REVIEW			
Resources/Issues Considered	Not Present	Present and Not Affected	Present and Potentially Affected
Hazardous or Solid Waste*	✓		
Invasive and Non-native Species*			✓
Land Use			✓
Migratory Birds*			✓
Native American Religious Concerns*	✓		
Prime and Unique Farmland*	✓		
Soils			✓
Special Status Species			✓
Threatened and Endangered Species*	✓		
Vegetation			✓
Visual Resources			✓
Water Quality*	✓		
Wetland or Riparian Zones*	✓		
Wild and Scenic Rivers*	✓		
Wilderness*	✓		
Wildlife			✓
Wild Horse and Burro		✓	
* Consideration Required By Law or Executive Order			

Notes:

1. A cultural survey was conducted on May 13, 2011 and July 29, 2011 for the proposed actions on public land and there were no prehistoric or historic resources found. No sites were found or are known that would be eligible for listing in the National Register of Historic Places.

2. The proposed action is within the experimental non-essential range for the California condor, but no condors have been this far south and there are no suitable nest sites or forage base in the area. This project will have no impact on the success of the condor reintroduction efforts.

Present and Not Affected

Air Quality: Mohave County is in an attainment area where air quality is generally considered good. Dust is created each time a vehicle uses the existing dirt roads, however, dissipation occurs rather quickly the majority of time based on normal wind conditions in the area. The proposed actions would produce dust similar to several vehicles traveling on the dirt roads in the area. The temporary increase in dust would dissipate at the end of the project. The project would not result in any long term impacts to air quality.

Grazing: The proposed action is within the Mineral Park allotment which is a year-round cow calf operation. The less than 0.75 acres of proposed disturbance would have no impact on the available forage for livestock or other ranch operations.

Wild Horse and Burro: The proposed action is located within the Cerbat Herd Area, which is designated for the maintenance of a viable population of wild and free roaming horses. The proposed action will not result in any additional fences or other barriers that will inhibit horse movement. The 0.75 acres of surface disturbance would not impact the forage base for the wild horse herd. The fencing around the proposed breaker site will not exclude wild horses from any water sources or prevent them from moving across the landscape and so would not impact their ability to survive.

IV. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

A. Expected impacts from the Proposed Action include the following:

Invasive, Non-Native Species: The following invasive non-native species were identified within the project area.

Red Brome is a winter annual grass that was brought to the United States from Mediterranean countries in the 1880s and has been in Arizona since 1907. It is self pollinating and produces large numbers of viable seeds. It is spread by wind, water, animals and humans. It readily establishes in disturbed sites but has also shown the ability to establish in undisturbed landscapes.

Sahara Mustard is an annual herbaceous plant that was brought in from Europe or Africa in the 1900s. In the 1950s it was found in Yuma, Arizona, and by the 1970's it was widespread throughout southwestern portions of the state. It produces large numbers of seeds that are spread by wind, water, animals and humans.

As stated in the POD, UNSE trucks that come from outside of the Kingman area will be pressure washed to prevent the spread of new non-native invasive species into the project area. The non-native species in this area include red brome and Sahara mustard, both of which are already common within the project area and would not spread further as a result of this project. Both of these species could be spread from the project area to other areas if vehicles and equipment are not cleaned prior to leaving the project area. UNSE typically washes their vehicles when completing a job which would prevent the spread of invasive species found on this project to new areas

Land Use: Existing land uses in the area include transmission lines, roads, mining, and ranching. Amending the existing ROW's would consist of minor modifications. The proposed actions would not result in any conflicts with other land uses in the area.

Migratory Birds: Species of migratory birds that potentially nest within the project area include the following: Bendire's thrasher, cactus wren, mocking bird, ladder-backed woodpecker, mourning dove, loggerhead shrike, and black-throated sparrows.

Some potential nesting and foraging habitat would be removed (approximately 0.75 acres). Project construction would take place between September 16 and March 14 outside of the breeding season (March 15-September 15) to prevent impacts to individuals or the area would be surveyed by a biologist for migratory bird nests prior to construction as described in the POD, Appendix 1. Activities would result in temporary disturbances to migratory and resident birds within the project area but would not have a measurable impact to populations.

Soils: Soils within the project area are coarse sand and gravelly. Soil appears to be stable, no headcuts or signs of accelerated erosion were seen in the project area. There are several washes that cross the project area and one that runs through the proposed breaker site.

Most of the project has been previously disturbed but has re-vegetated and soils have remained intact. The small amount of clearing and soil disturbance would not result in accelerated erosion and soil loss around the project area.

Special Status Species: Sensitive or state listed species that might occur within the project area include: bald eagle, golden eagle, peregrine falcon, burrowing owl, and multiple bat species. Bats forage throughout the project area and many mines in the area that provide roosting habitat. Peregrine falcons and golden eagles would nest in nearby cliffs and would forage around the project area, but because of the ongoing noise and other disturbances from the roads and the mine it is likely that they don't use the area in high numbers. Burrowing owls could use the project area but no sign of them was seen during the field visit on July 29, 2011.

The proposed action is not anticipated to impact any special status species beyond the temporary disturbance associated with the construction activities which would not impact special status species after construction is complete.

Vegetation: The project area lies within the Mojave and Sonoran desert transition zone that contains species from both deserts. Common vegetation within the project area includes: creosote bush, white bursage, banana yucca, ray-less golden-head, flattop buckwheat, cheese weed, and catclaw.

Approximately 0.75 acres of vegetation would be removed for placement of poles, and the isolation breaker site. Protected plants such as yuccas and cacti will be avoided or transplanted as stated in the POD, Appendix 1. Some additional vegetation would be run over by construction equipment during off road travel to pole locations, but it may not die as a result. The removal of the vegetation would not result in a downward trend for any of the plant populations within the project area.

Visual Resources: The proposed action occurs within VRM class IV which means that projects within this class can be visible to observers and can dominate the viewshed. As this project is compatible with the objectives of Class IV VRM there will be no impact to visual resources. Regardless of which VRM class is present, all projects should be designed to minimize their visual impact. The 20.8 kV line would parallel an existing road which would provide access to the pole locations. The use of self-weathering steel monopoles and non-specular conductors will help the power line blend into the background and be less noticeable on the landscape. The use of an existing road for access to the pole locations will reduce the overall visual impact from this project. Additionally the removal of several miles of existing powerline would reduce the amount of visual impact within the project area. The breaker site would be fenced with 7ft chain link and razor wire which would be visible from the main road. These design features would allow the project area to continue to meet the VRM Class IV objectives.

Wildlife: Typical wildlife within the project area include desert cottontails, black-tailed jackrabbits, rattlesnakes, lizards, Gambel's quail, and rodents.

A small amount of foraging habitat (0.75 acres) would be removed as a result of pole placement and the isolation breaker unit. Forage is sparse within the project area and the amount removed by the proposed action could limit forage for a few individuals but should not impact wildlife populations within the area. Construction activities could cause some temporary disturbance to wildlife over the 90 day life of the construction. The disturbance would likely cause wildlife to avoid the area during construction activities. After completion of construction, wildlife would be able to use the project area at the same level as before construction. Given the number of existing ROWs, in the project area, and the nearby developed private land

the adjacent open pit mine, the amount of wildlife use in this area is likely limited already and implementation of the proposed action would not further affect wildlife in and around the project area.

B. Expected Impacts from the No Action Alternative

If the no action alternative were selected there would be no change to the current conditions described in the affected environment. None of the actions described in the proposed action would occur. There would be no impact to the following resources from the No Action Alternative: Air Quality, Invasive and Non-native species, Land Use, Migratory birds, Soils, Special Status Species, Vegetation, Visual Resources or Wildlife.

C. Cumulative Impacts

Vegetation:

Scope: The scope for cumulative impacts is a 2 mile radius around the proposed breaker site. This area was chosen because the disturbance in this area is sufficient to show that the proposed disturbance is negligible.

Past/present impacts: Impacts to vegetation were measured based on existing surface disturbance within the scope. By far the largest impact within the affected area is from the Mineral Park Mine. This area has been mined since the late 1800's and is currently expanding its operations. The disturbed area associated with this mine is approximately 1,700 acres, approximately 355 of which are on unpatented mining claims on public lands. Past and present impacts to vegetation were combined since any past impacts that have re-vegetated are no longer impacts.

Mohave County also operates a landfill within the affected area. The landfill currently occupies approximately 160 acres.

Numerous roads exist in the area, including Mineral Park Road, a county maintained improved surface road which provides access to MPI's mine and the landfill. Also the old highway between Boulder, Nevada and Kingman is located nearby. Other roads have been constructed for mining and ranching activities, as well as for utilities.

Instead of trying to explain the impacts, Map 1 shows the surface disturbance from 2010 aerial photos with the proposed impact from the breaker box in a small red square in the center of the map. This clearly shows that the amount of proposed disturbance in this area is negligible when compared to existing disturbance.

Foreseeable future: The Mineral Park mine is currently working on an expansion plan and an updated mining plan of operations. The expansion is expected to result in an additional 451 acres of surface disturbance.

Mohave County's parcel for its landfill is approximately 560 acres. It is likely that eventually most, if not all, of this land would be used for additional landfill area given the historic population growth of the Kingman area.

Residential developments would likely continue on private land.

Map 1: Estimated Total Disturbance Compared to Existing Disturbance Within 2 Miles of the Project Area.



Visual Resources:

Scope: The scope was determined as the area where this project would be noticeable to the casual observer. This was determined as a short section of highway 93 and the mineral park road heading towards the mine. Observers would be moving at both of these locations and the view of the mine would dominate the viewshed in both areas.

Past/present: The addition of a few poles and some chain link fence might be visible but would not draw attention because of the scale of disturbance from the mine.

Foreseeable future: The mine is going to get bigger and dominate the viewshed even more. On private land residential developments would also continue. Additional powerlines and substations might be constructed to accommodate the increased electrical needs of the area. These impacts are all allowable in VRM class IV areas.

CUMULATIVE IMPACTS FROM THE NO ACTION ALTERNATIVE:

There would be no changes to existing conditions on public land within the project area if the proposed actions were not authorized and constructed. However the public land in project area is designated as disposal land in the RMP so this land might change ownership in the future.

V. CONSULTATION AND COORDINATION

Mike Gibelyou	Right-of-Way Specialist, UniSource Energy Services
Ed Devenyns	Mineral Land Consultant, Mineral Park, Inc.

August 2, 2011. This proposal was presented at the BLM/bi-monthly Project Coordination Meeting.

Preparer(s): Kingman Field Office

Ammon Wilhelm: Wildlife Biologist
Andy Whitefield: Realty Specialist
Tim Watkins: Archaeologist

Environmental Coordinator: David Brock, Kingman Field Office

Bureau of Land Management, Kingman Field Office
FINDING OF NO SIGNIFICANT IMPACT

NEPA Document Number: DOI-BLM-AZ-C010-2011-0040-EA

Finding of No Significant Impact: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that impacts are not expected to be significant and an environmental impact statement is not required.

/ s / Ruben A. Sánchez
Field Manager, Kingman

9/23/2011
Date

DECISION RECORD

NEPA Document Number: DOI-BLM-AZ-C010-2011-0040-EA

Decision: My Decision is to amend right-of-way AZAR 33296 and grant rights-of-way AZA 35723 and AZA 35757 as described in the proposed action. The amendment to AZAR 33296 would be to authorize UNS Electric to construct, operate, maintain and terminate an additional portion of a 20.8 kV power line to private property. Also the amendment is to authorize an area for an isolation breaker, an additional 20.8 kV under build, and a fiber optic line under build in order to operate Mineral Park, Inc.'s (MPI) electrical connection which is being modified so that MPI can generate electricity for increasing the mine's capacity to process ore.

Right-of-way AZA 35723 is to be granted to MPI to construct, operate, maintain, and terminate a fiber optic line under build on UNS Electric's 69 kV power-line authorized under AZAR 33296 and an unauthorized 13.2 kV power line owned and operated by MPI. That power line is to be authorized under right-of-way AZA 35757.

Rationale for Decision: These rights-of-way and the amendment to AZAR 33296 would be for increasing MPI's ability to mill copper and molybdenum at a higher rate than current milling capacity allows. In order to do this MPI needs more electricity than is available from UNS Electric's 69 kV power line. MPI is in the process of installing a gas fired generator which will operate on the same transmission network as electricity delivered by UNS Electric. This will be good for the local economy by increasing the number of MPI's employees to approximately 60 positions.

Stipulations:

See the attached grants.

/ s / Ruben A. Sánchez
Field Manager, Kingman

9/23/2011
Date

DOI-BLM-AZ-CO10-2011-0040-E Appendix 1
PLAN OF DEVELOPMENT
UNS ELECTRIC, INC. (UNSE)
MINERAL PARK ISOLATION BREAKER
& FIBER OPTIC COMMUNICATION LINE
AZAR-33296- amendment
JUNE 2011

1. Purpose and Need for Right-of-Way

The Applicant, UNS Electric, Inc. (UNSE) is applying to expand part of the right of way to locate a 69kV isolation breaker and underbuild a fiber optic line, for internal communications, to the proposed breaker, on an existing 69kV line on Federal Lands in the Mineral Park area of Mohave County, Arizona. The isolation breaker and fiber optic line is to support the operation of the Mercator Mine's new 45MW gas-fired turbine generator.

2. Location

- a. The isolation breaker site will be located on public land identified as T. 23 N., R. 18 W., NE $\frac{1}{4}$ Section 26 as shown on Exhibit A. An as-built survey will be provided upon completion of the project.
- b. The fiber optic line will be located on the existing 69kV line on public lands identified as T. 23 N., R. 18 W., Sections 26 & 34 and T. 22 N., R. 18 W., Section 3. Arizona State Trust Land sections affected are T. 22 N., R. 18 W., Section 4. Private land sections affected are T. 23 N., R. 18 W., Section 35. Fiber line route is depicted on Exhibit B.

3. Design Factors

- a. The breaker site would be located in the NE $\frac{1}{4}$ of Section 26 adjacent to the existing 69kV line. The existing line is offset within the 50 foot right of way and there is 45 feet of usable right of way on the westerly side of the pole line. The additional right of way width needed would be a strip of land 35 feet wide by 330 feet in length, or one span length. The breaker site will be approximately 60 feet wide and 120 feet long. This area includes metering equipment for the 69kV line serving the Mercator Mine. This area will be graded and fenced. Concreted foundations will be constructed for placement of breaker equipment. A ground grid will be placed on site and three feet outside the fence boundary. The chain

link fence will have cad-welded connections to the ground grid installation to protect the fence from accumulating an electric charge from the lines and equipment. Two driveway access points will be constructed from Mineral Park Road to provide access to the site. The driveways will be constructed to meet County specifications for all-weather access. New 69kV poles will need to be placed to reroute the existing line to tie into the new breaker site. The old poles will not be removed as they provide an emergency alternate connection to the mine if there is a problem with the breaker.

- b. Fencing, welding, concrete work, grading, permanent foundations, and road building will be expected on Federal Lands in order to construct the breaker site. The pole line and fiber optic installation will not require these types of activities.
- c. Soils and geology in the area are suitable for placement of the power line and isolation breaker site.
- d. The fiber optic line will be strung on 12 foot wooden or fiberglass cross arms that will be replacing the existing distribution conductor connections. See attached Exhibit C for 69kV pole design. The 24 count ADSS fiber line will be under-built on existing 69kV poles. Some poles may need to be replaced to allow NESC ground clearance requirements.

4. Additional Components

- a. Any equipment storage areas will be located on private land.
- b. The isolation breaker is needed to provide operational protection to the UNSE system interconnection that will connect the new gas-fired turbine generator being constructed by the Mercator Mine. The breaker site will also include a new metering point for the mine. The existing metering point on mine property will be removed.
- c. The fiber optic line is to provide internal communications and control to the breaker equipment by UNSE operations. A fiber line will be built from the mine to the breaker site and this segment will be owned and operated by the mine.

5. Government Agencies Involved

- a. A Mohave County road permit will be applied for once a BLM permit is acquired and a construction schedule has been determined. Typically, the time to acquire this permit is about 1 week. This time frame may be longer for the driveway access point to the new breaker site.

- b. An Arizona State Trust Lands application has been filed to allow for the installation of the fiber optic line. UNSE will endeavor to have this permit fast-tracked or get permission to install the fiber line before the standard application processing time of 12 months.

6. Construction of Facilities

- a. Breaker site construction will begin once all equipment has been received from suppliers. The site will be cleared of vegetation and graded. The ground grid will be placed at a depth of 18 inches with connections above ground for bonding the fence and utility facilities to the ground grid. Foundations will be dug and concrete poured for the poles and equipment within the site. A seven foot chain link fence with razor wire will be installed along the perimeter. Two 16 foot gates in the fence will match the new driveways to Mineral Park Road.
- b. The existing hip bracket attachments for the distribution line will be removed. The fiber optic line will be strung on new 12 foot wooden or fiberglass cross arms. Note: The appearance of the fiberglass at street level will be the same as wood arms. The fiber line will be pulled into a bracket by a p-line then pulled from a cable trailer. The fiber will be terminated at the breaker site.
- c. It was determined to place the fiber line in an underbuild position rather than bury the line because of soil disturbance and cost. The existing pole heights dictate a particular cross-arm configuration to install the fiber optic line as underbuilt. This configuration has raptor protection issues so phase covers will need to be installed on the cross-arms to create a raptor proof design. The placement of phase covers is depicted on Exhibit C-1. This option was deemed more cost effective than replacing each pole with a much taller structure to meet another raptor proof design. Note: The cost of installing a taller pole is approximately \$7500 while the cost of placing phase covers, 2 per pole, would be \$200.
- d. Vegetation such as cactus, Joshua trees, yucca, will be avoided where possible and transplanted if avoidance is not feasible.
- e. UNSE construction crews adhere to all applicable OSHA standards. This includes personal protective equipment [PPE] and equipment operation. Documented tailboard meetings are held daily before any construction is commenced and when new personnel arrive at the work site to discuss aspects of the project and review hazards and any mitigation and safety concerns about individual tasks.

- f. Disposal of all liquid or solid waste produced during operation on this right-of-way shall be in an approved manner so it will not impact the air, soil, water, vegetation, and animals. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
- g. UNSE shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release of spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

7. Resource Values and Environmental Concerns

- a. It is anticipated a cultural survey will be done by BLM personnel.
- b. If during construction any previously unidentified historic or prehistoric cultural resources are found, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery, and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or

criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

- c. It is anticipated biological evaluation will be done by BLM personnel.

8. Stabilization and Rehabilitation

Disturbed areas around the poles and guy anchor assemblies will be raked to scarified and allow natural seeding to occur.

9. Operation and Maintenance

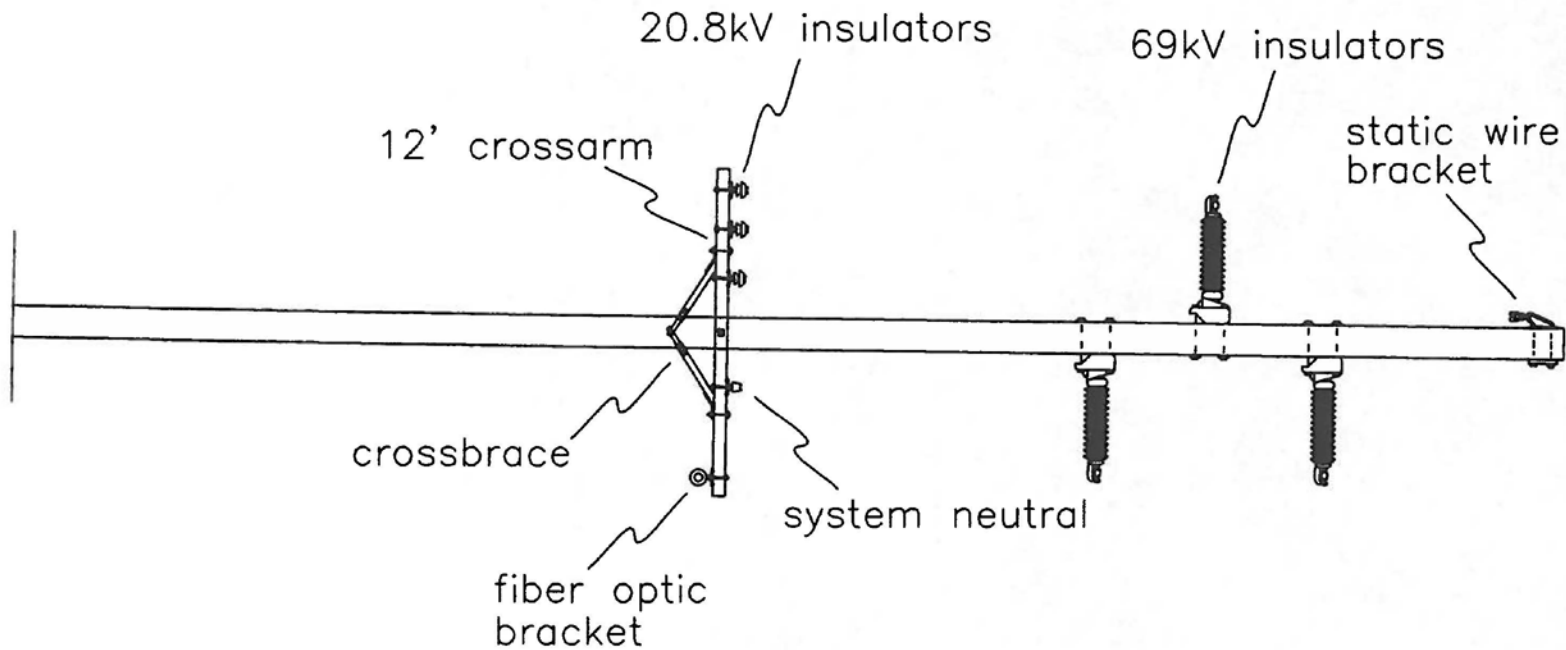
A service truck will be dispatched to investigate outages on an as-needed basis. Typically to determine the cause of a line outage if such occurs.

10. Termination and Restoration

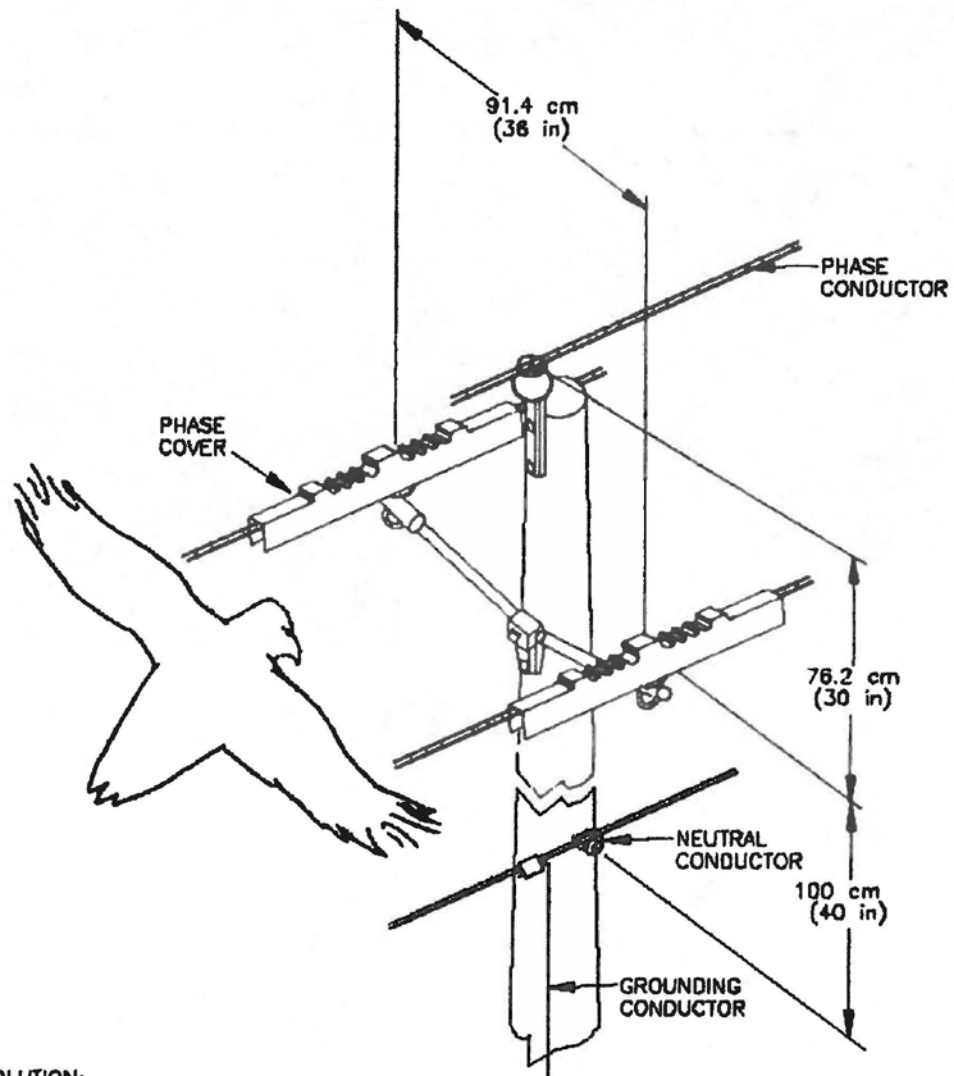
Upon termination of the right-of-way, all improvements will be removed within ninety (90) days. Disturbed areas will be ripped to a depth of 2" to promote natural seeding.

UNSE acknowledges that in the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part 2800, including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.

EXHIBIT C



TAILBOARD DISCUSSED JOB: <input type="checkbox"/>		Scale: NONE Date:		UniSourceEnergy SERVICES	STATE	DISTRICT	TASK NO.
FOREMAN'S SIGNATURE		Drawn by:			COUNTY	DETAIL MAP NO.	WORK ORDER NO.
					MOHAVE		



SOLUTION:

1. COVER LOWER TWO PHASE CONDUCTORS WITH MANUFACTURED COVERS. A COVERING SHOULD BE USED THAT DOES NOT REDUCE THE BIL OF THE INSULATOR.

Energized ———
Grounded - - - -

FIGURE 5.12: Solution for compact three-phase design.

Exhibit C-1
Phase cover diagram



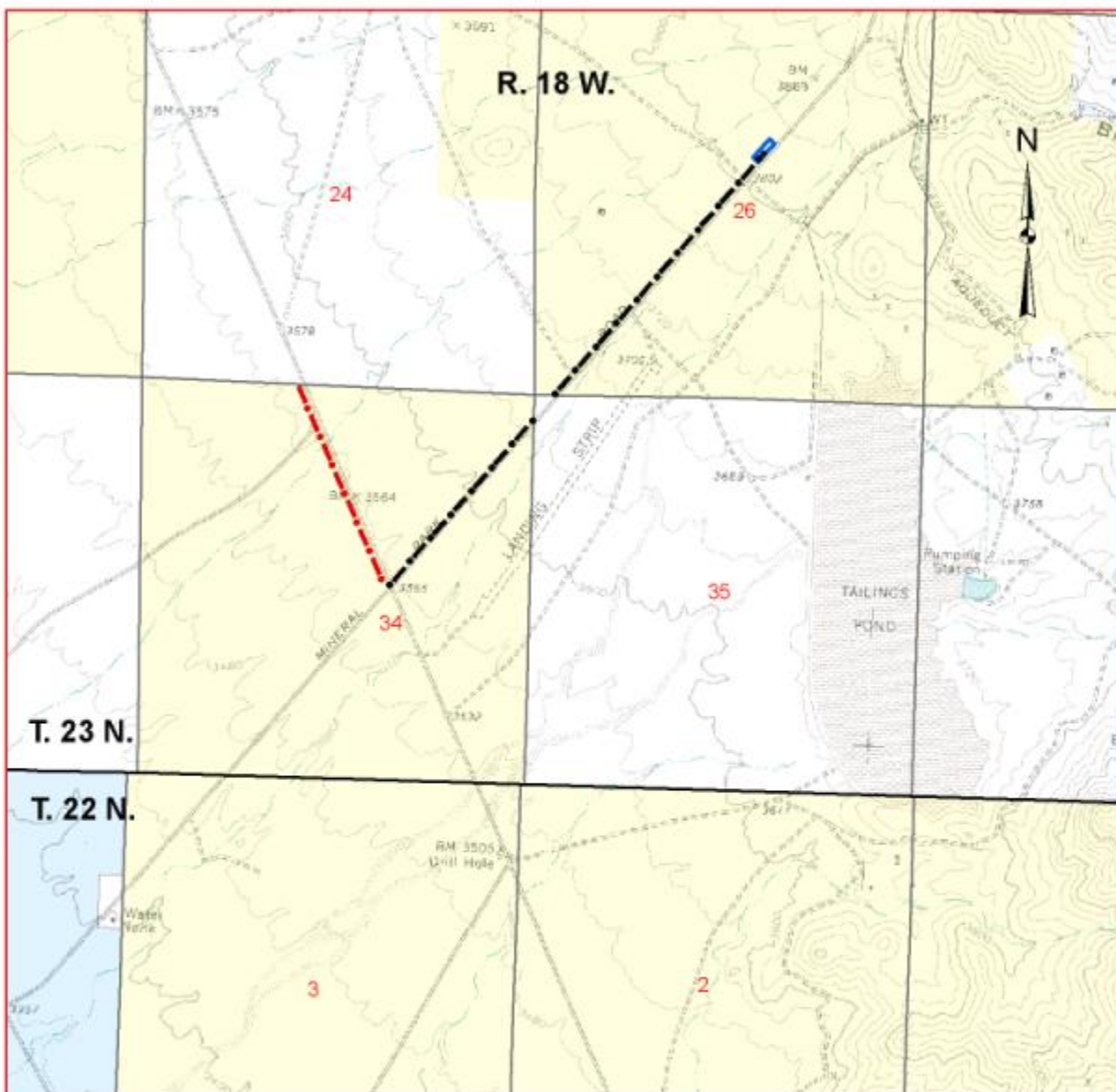
EXHIBIT D
DESERT TORTOISE HANDLING GUIDELINES

1. Stop your vehicle and allow the tortoise to move off the road.
2. If the tortoise is not moving, gently** pick up the tortoise and move it approximately 200 feet off the road to a shaded location.
 - a. **Do not** turn the tortoise over.
 - b. Move the tortoise in the direction it was traveling. If it was crossing the road, move it in the direction it was crossing.
 - c. Keep the tortoise within 12-18 inches of the ground, move slowly so as not to cause it to become alarmed.
 - d. Release the tortoise under the shade of a bush or rock.

****** Tortoise store water in their bladder. If a tortoise becomes alarmed its defense is to void its bladder onto the captor. This could lead to dehydration of the tortoise and potentially to death.

3. Prior to moving any parked vehicle or equipment at the project site check for tortoise under the vehicles.

Map1: Location of UniSource Proposed 20.8 kV Power Line (Portion Freestanding and Portion Underbuild on Existing 69 kV Power Line, to be Authorized Under Amendment to AZAR33296).



0 0.25 0.5 1 Miles



No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

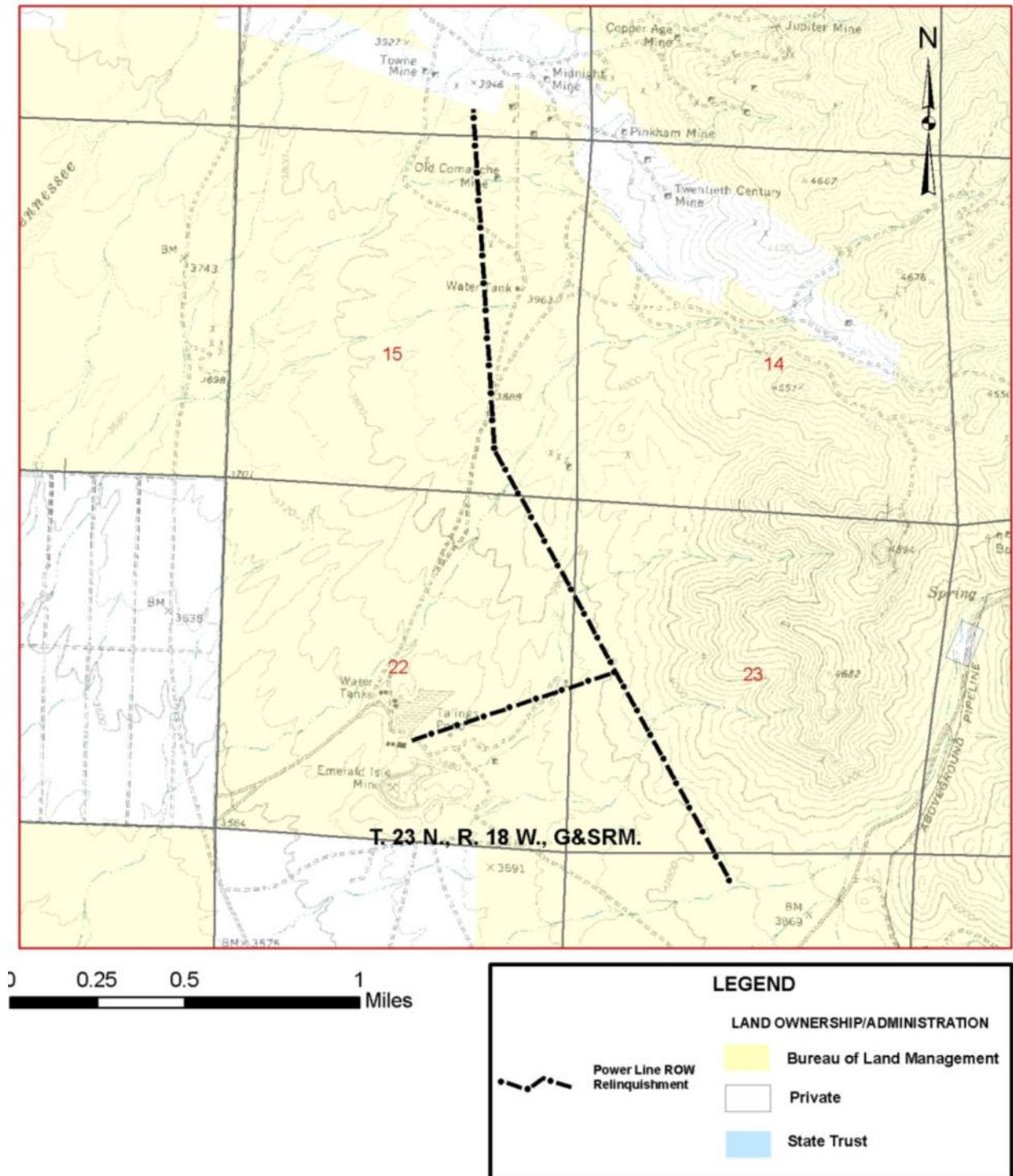
LEGEND

- Subject Power Line Right-of-Way Underbuild Portion
- Subject Power Line Right-of-Way Stand Alone Portion
- Breaker Site

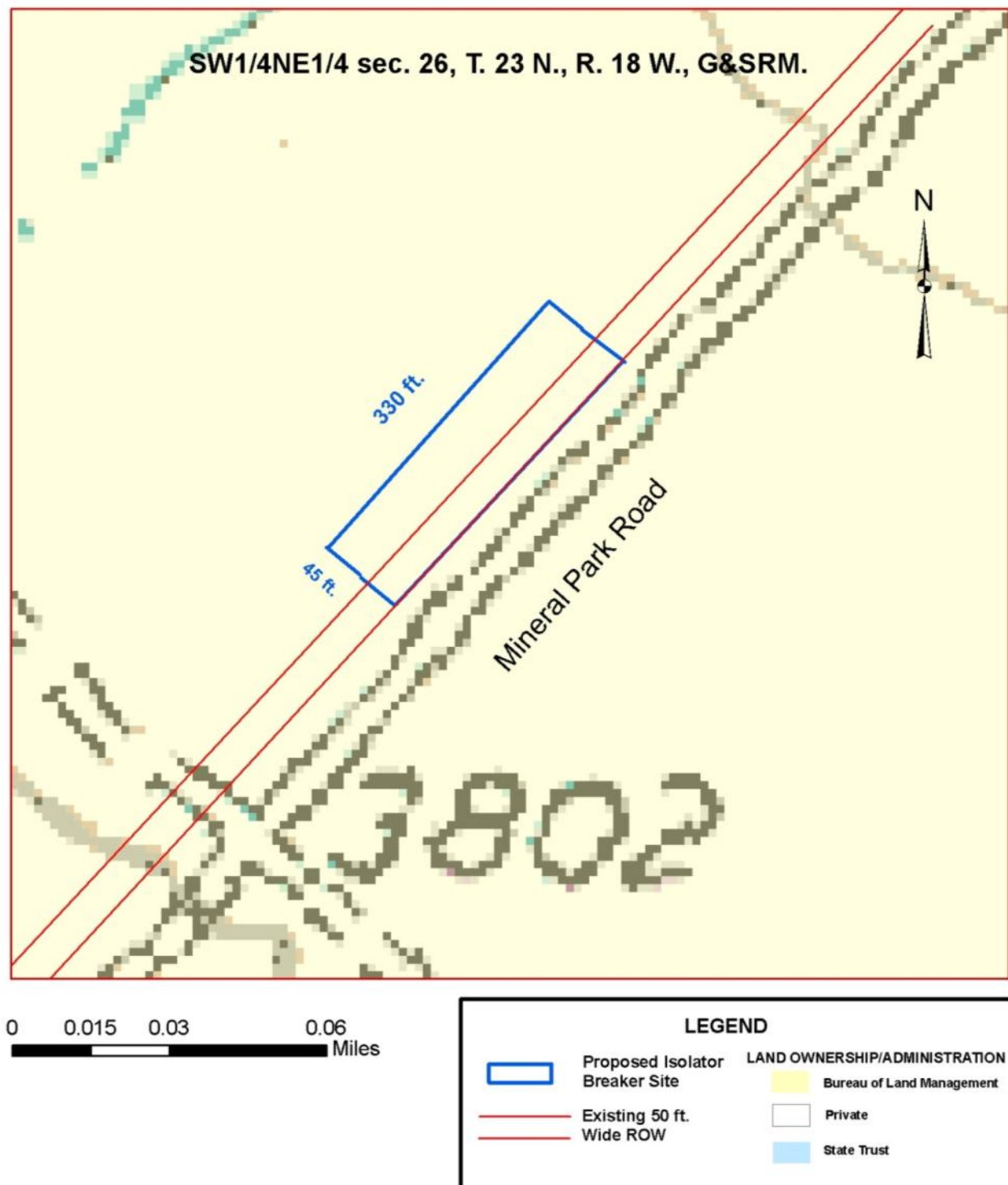
LAND OWNERSHIP/ADMINISTRATION

- Bureau of Land Management
- Private
- State Trust

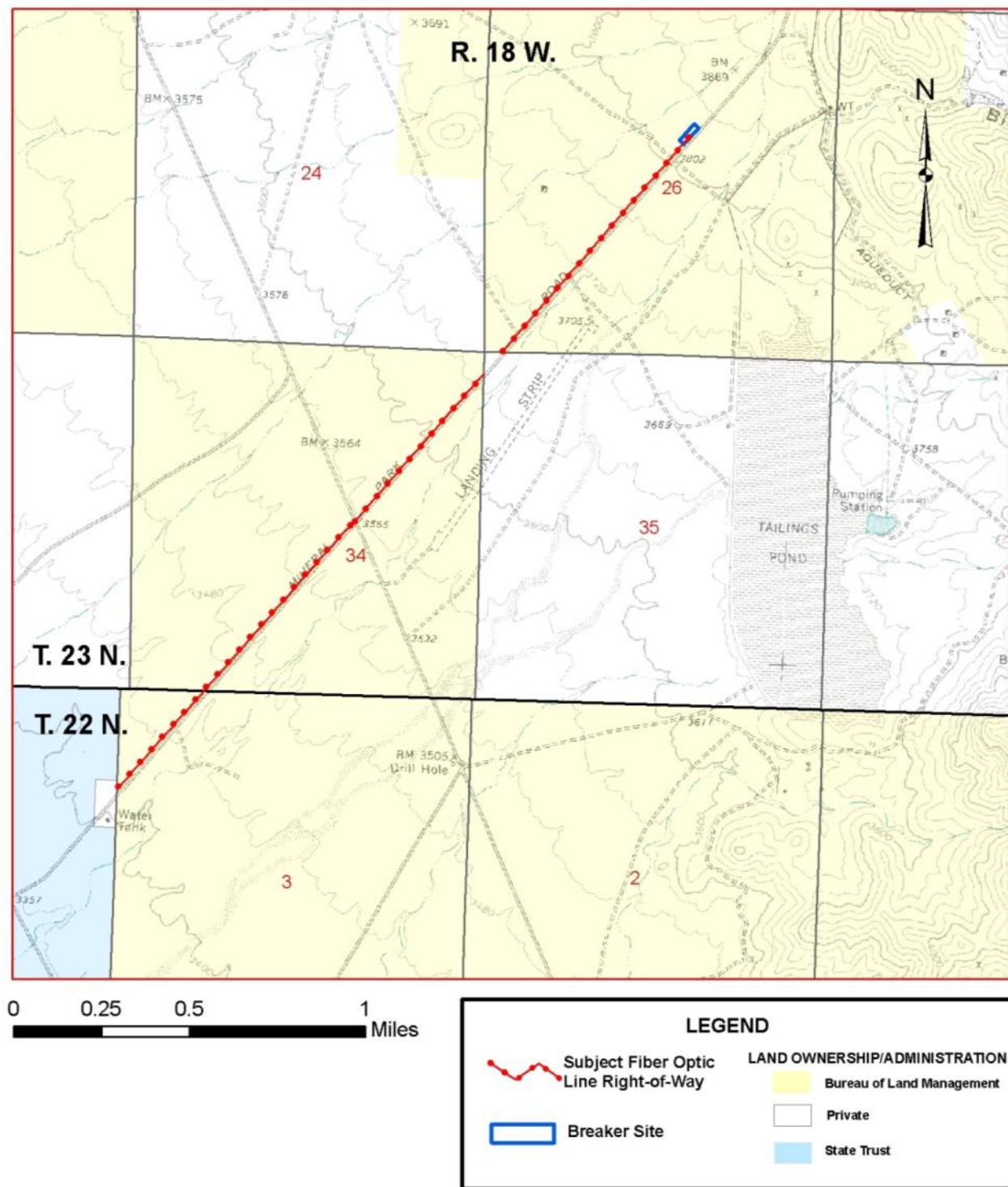
Map 2: Location of Portion of Right-of-Way AZPHX 34352 to be Relinquished



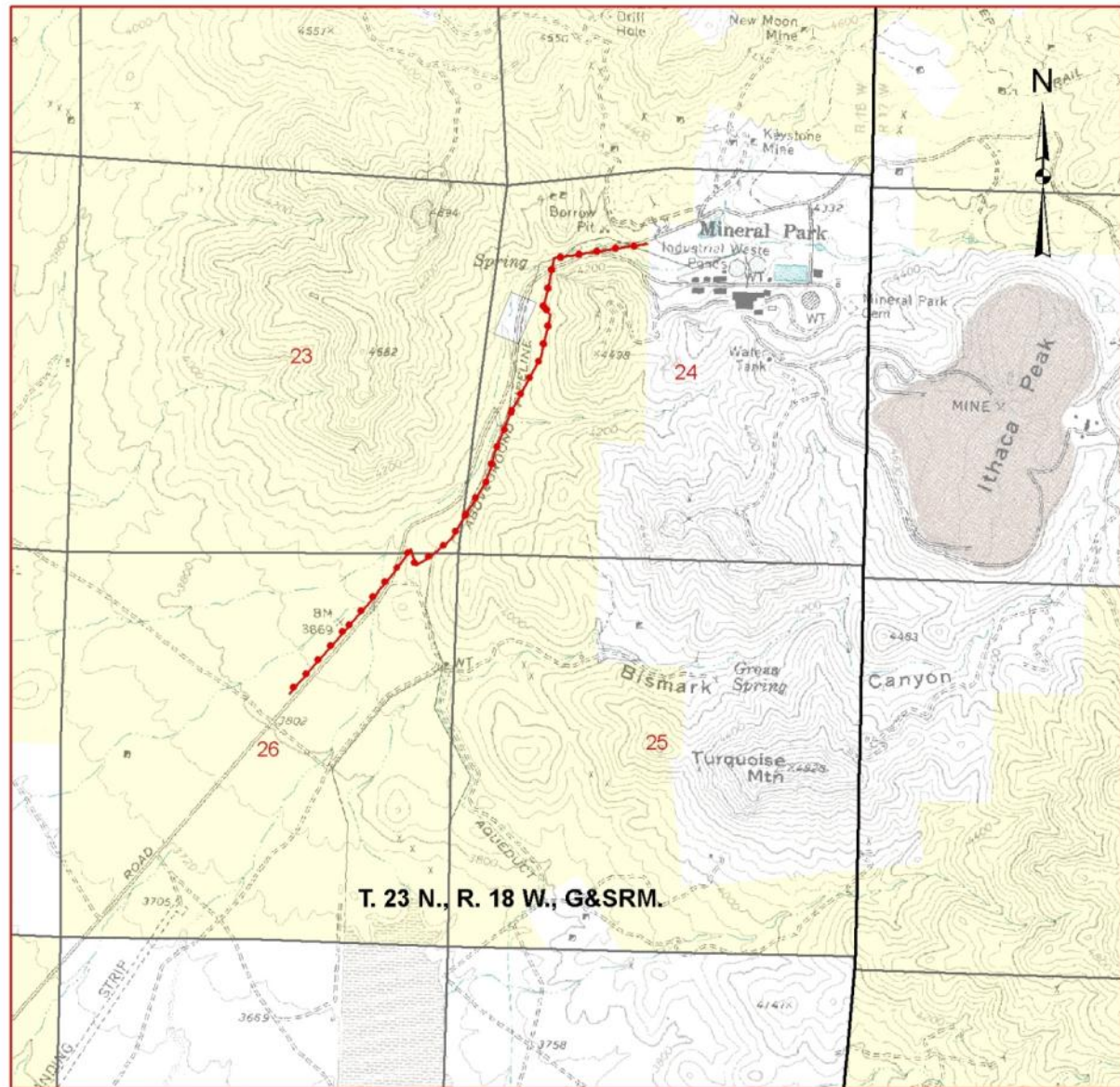
Map 3: Proposed Isolation Breaker to be Authorized Under Amendment AZAR 33296



Map 4: Proposed UniSource Fiber Optic Line (Underbuild on Existing 69kV Power Line to be Authorized Under Amendment to AZAR 33296)



Map 5: Proposed Mineral Park Fiber Optic Line, Serial Number AZA 35723



0 0.25 0.5 1 Miles

LEGEND

LAND OWNERSHIP/ADMINISTRATION



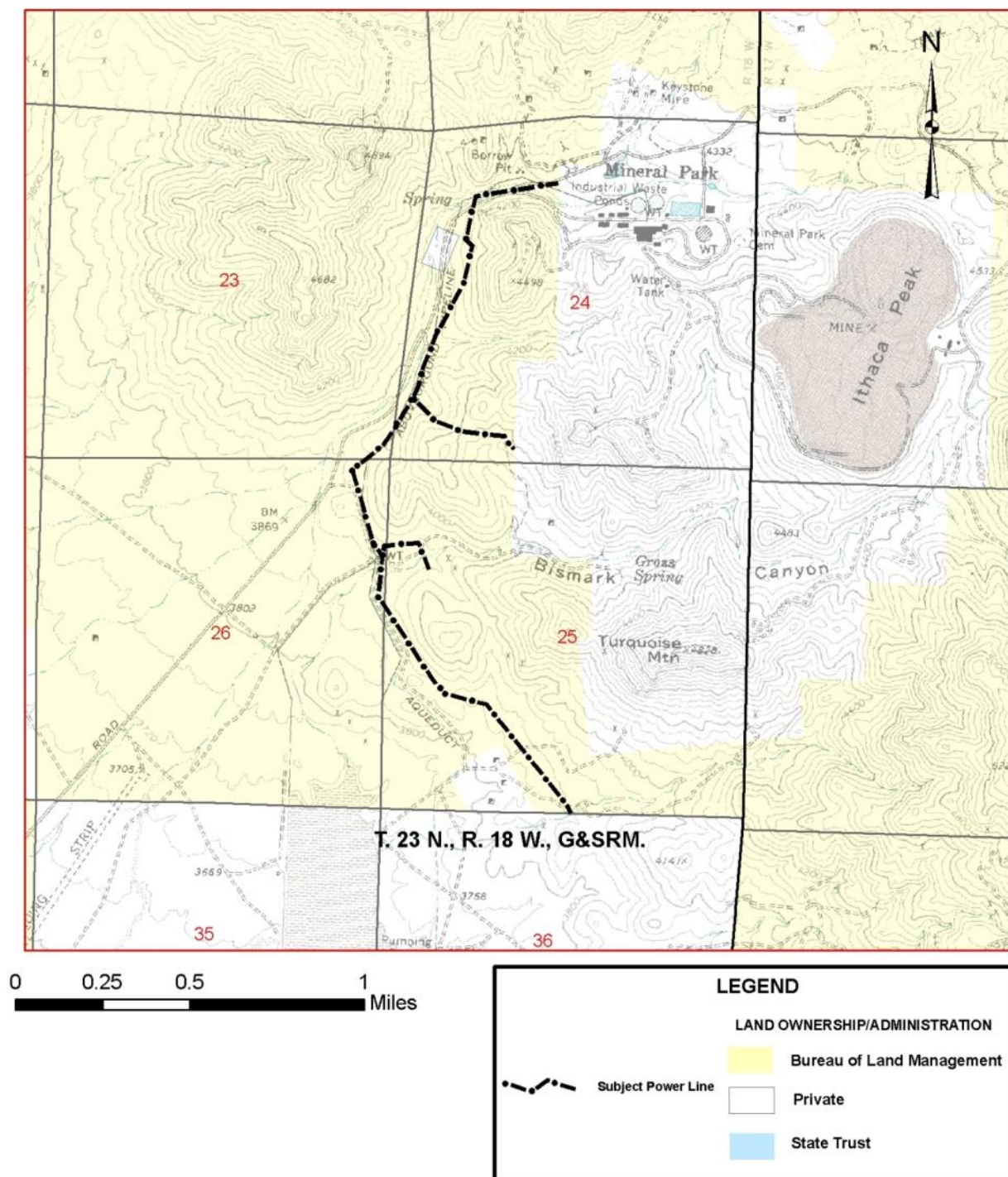
Subject Fiber Optic Line

Bureau of Land Management

Private

State Trust

Map 6: Mineral Park's Existing 13.2 kV Power Line, Proposed to be Authorized Under Right-of-Way AZA35757



PLAN OF DEVELOPMENT

UNS ELECTRIC, INC. (UNSE)

MINERAL PARK CONNECT 20.8kV POWERLINE

AZAR-33296-amend

FEBRUARY 2011

1 . Purpose and Need for Right-of-Way

The Applicant, UNS Electric, Inc. (UNSE) has applied for a 20.8 kV overhead distribution power line right-of-way with appurtenant facilities in the Chloride-Mineral Park area of Mohave County, Arizona. UNSE plans to install the power line to provide a power grid connection for existing homes on private land. The new 20.8kV power line will be constructed from the existing distribution line on Mineral Park Road, as permitted by AZAR-33296, and will connect to an existing UNSE line on private lands.

2. Location

The power line will be located on public land identified as T. 23 N., R. 18 W., Section 34, Gila and Salt River Meridian, Mohave County, Arizona as shown on Exhibit A. Private land sections affected are T. 23 N., R. 18 W., Section 27.

3. Design Factors

- a. The 20.8kV power line would be located in a ROW 25 feet wide, 4,788.67 feet long and consist of approximately 20 wood poles, 45 foot tall class 3 [with 6.5 feet of said length buried in the ground]. The ROW on Federal land would be 25 feet wide and 2,845 feet long consisting of 1.63 acres and would include 10 poles and two guy anchor assemblies. The power line will be designed to be raptor proof as shown on Exhibit B -- pole configuration. Non-specular #2ACSR conductor will be used. Spans will be approximately 325 feet long and ground clearance will meet or exceed National Electric Code clearance requirements with the lowest of the wires will be a minimum of 18 feet above ground level.
- b. Soils and geology in the area are suitable for placement of the power line.
- c. No fencing, welding, concrete work, grading, permanent foundations, and road building is expected on Federal Lands. The poles will be laid out in the existing bladed roadway – Old Boulder Dam Highway [see permit AZA-32476]. This existing road right of way will be used for access to the new line. Periodic access to the pole line will be required for maintenance. Installation should be completed within thirty (30) days.

4. Additional Components

- a. The private property owners in Section 27 are currently being fed by an existing electric power line that runs south from Chloride along the Cerbat foothills. This existing line was permitted under AZPHX-34352 and is scheduled to be taken down because of extreme age and severe terrain constraints for maintenance. This proposed project will allow the residents to be fed by a newer line that has easier maintenance access.
- b. Therefore, a connection needs to be made to from the existing line paralleling Mineral Park Road in Section 34 to an existing pole on the Old Boulder Dam Highway in Section 27.
- c. An additional additional underbuild segment of 329 feet and an associated guy anchor assembly will need to be constructed on the Mineral Park Road segment to create a line design configuration for the new line to tap off of in Section 34.
- d. Any equipment storage areas will be located on private land.

5. Government Agencies Involved

- a. A Mohave County road permit will be applied for once a BLM permit is acquired and a construction schedule has been determined. Typically the time to acquire this permit is less than 1 week..

6. Construction of Facilities

- a. Once all permits and easements have been acquired, the job will be released to construction. The construction process will take approximately thirty days. A digger truck will be used to auger the holes, 6.5 feet deep and 24" in diameter. The holes will be covered by a wood platform (ends from empty conductor reels) until the poles are placed in them. A line crew will attach the necessary hardware to the poles, and then place the poles, tamping the loose dirt around the poles to secure them. The conductor wires will be strung and tensioned and the connections will be made at junction points on the existing power lines.
- b. The construction crew will consist of a digger truck with 2 personnel. The line crew typically consists of one large bucket truck and a standard pickup truck. Both the digger truck and bucket trucks are 10 wheeled vehicles with 2 rear dual axles. No backhoe is anticipated unless rock is encountered. A rubber tired flatbed trailer with conductor reels attached will be used to string the necessary wires. If vehicles are used from out of the local area they will be power washed to reduce the spread of noxious weeds.
- c. Some vegetation will be disturbed as part of the auguring process. However, the pole locations are a few feet from the bladed area of the existing road so a majority of the work can be done from the road. Therefore, minimal disturbance

of existing vegetation is anticipated. Vegetation such as cactus, Joshua trees, yucca, will be avoided if possible and transplanted if avoidance is not feasible.

- d. UNSE construction crews adhere to all applicable OSHA standards. This includes personal protective equipment [PPE] and equipment operation. A tailboard meeting discussing the scope of the job is held before any construction is commenced to discuss aspects of the project and review any mitigation and safety concerns about individual tasks.
 - e. Disposal of all liquid or solid waste produced during operation on this right-of-way shall be in an approved manner so it will not impact the air, soil, water, vegetation, and animals. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
 - f. UNSE shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release of spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
7. Resource Values and Environmental Concerns
- a. It is anticipated a cultural survey will be done by BLM personnel.
 - b. If during construction any previously unidentified historic or prehistoric cultural resources are found, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery, and consult with the State Historic Preservation Officer in accordance with 36 CFR

Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

c. It is anticipated biological evaluation will be done by BLM personnel.

8. Stabilization and Rehabilitation

Disturbed areas around the poles and guy anchor assemblies will be raked to scarified and allow natural seeding to occur.

9. Operation and Maintenance

A service truck will be dispatched to investigate on an as-needed basis. Typically to determine the cause of a line outage if such occurs.

10. Termination and Restoration

Upon termination of the right-of-way, all improvements will be removed within ninety (90) days. Disturbed areas will be ripped to a depth of 2" to promote natural seeding.

UNSE acknowledges that in the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part 2800, including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.

PLAN OF DEVELOPMENT
UNS ELECTRIC, INC. (UNSE)
AZPHX-034352 – partial relinquishment
JUNE 2011

1. Purpose and Need for Right-of Way

UNS Electric, Inc. (UNSE) intends to relinquish a portion of right of way granted under serial number AZPHZ-034352. This portion of line is being effectively replaced by a new distribution substation and 69kV lines and 20.8kV lines in the area. Reference permits AZA-33319 and AZAR-33296 amended.

2. Location

- a. The relinquishment area is located on public land identified as T. 23 N., R. 18 W., Sections 10, 15, 22, 23, 26 as shown on Exhibit A.

3. Design Factors

- a. The existing line will be taken down in the following manner: The conductor will be unclipped from the insulators. The insulators will be removed from the cross arms to prevent breakage during the decommissioning process. The wood poles will be cut at ground level and further cut into 8-10 foot sections. The cross arms would be detached from the poles. The metal wish-bone style cross arms will be cut into shorter lengths as needed. The conductor will be rolled up on reels to be shipped to a recycling company.
- b. Where trucks can access the line the conductor, insulators, hardware and cross arms will be removed and the poles cut in sections in place.
- c. Where trucks cannot access the line the poles will be cut down at ground level and the hardware components disassembled. Note: The poles are too badly weakened for a lineman to safely climb the pole for taking off the insulators and cross arm and cutting the pole in sections.
- d. Where existing roads exist along the route trucks can be used to haul the disassembled structure and materials away for disposal.
- e. Where roads do not exist ATV's will be used to drag the materials to locations where trucks can be utilized. Existing washes and trails will be utilized where available.

4. Additional Components

a. The dismantling of the pole structures will be done within the bounds of the right of way. In area where roads do not exist the materials will be dragged along the best route for minimizing disturbance outside of the permit boundary.

5. Government Agencies Involved a. BLM Kingman Field Office

6. Construction of Facilities a. NA.

7. Resource Values and Environmental Concerns

a. Since this is an existing line this section is not applicable.

8. Stabilization and Rehabilitation

Disturbed areas around the poles and guy anchor assemblies will be raked/scarified to allow natural seeding to occur.

9. Operation and Maintenance

NA.

10. Termination and Restoration

Upon removal of the materials UNSE will request this portion of permit AZPHX-034352 be relinquished.

PLAN OF DEVELOPMENT
UNS ELECTRIC, INC. (UNSE) MINERAL
PARK ISOLATION BREAKER
& FIBER OPTIC COMMUNICATION LINE
AZAR-33296-amendment
JUNE 2011

1. Purpose and Need for Right-of-Way

The Applicant, UNS Electric, Inc. (UNSE) is applying to expand part of the right of way to locate a 69kV isolation breaker and underbuild a fiber optic line, for internal communications, to the proposed breaker, on an existing 69kV line on Federal Lands in the Mineral Park area of Mohave County, Arizona. The isolation breaker and fiber optic line is to support the operation of the Mercator Mine's new 45MW gas-fired turbine generator.

2. Location

- a. The isolation breaker site will be located on public land identified as T. 23 N., R. 18 W., NE/4 Section 26 as shown on Exhibit A. An as-built survey will be provided upon completion of the project.
- b. The fiber optic line will be located on the existing 69kV line on public lands identified as T. 23 N., R. 18 W., Sections 26 & 34 and T. 22 N., R. 18 W., Section 3. Arizona State Trust Land sections affected are T. 22 N., R. 18 W., Section 4. Private land sections affected are T. 23 N., R. 18 W., Section 35. Fiber line route is depicted on Exhibit B.

3. Design Factors

- a. The breaker site would be located in the NE/4 of Section 26 adjacent to the existing 69kV line. The existing line is offset within the 50 foot right of way and there is 45 feet of usable right of way on the westerly side of the pole line. The additional right of way width needed would be a strip of land 35 feet wide by 330 feet in length, or one span length. The breaker site will be approximately 60 feet wide and 120 feet long. This area includes metering equipment for the 69kV line serving the Mercator Mine. This area will be graded and fenced. Concreted foundations will be constructed for placement of breaker equipment. A ground grid will be placed on site and three feet outside the fence boundary. The chain link fence will have cad-welded connections to the ground grid installation to protect the fence from accumulating an electric charge from the lines and equipment. Two driveway access points will be constructed from

Mineral Park Road [AZA-22631] to provide access to the site. The driveways will be constructed to meet County specifications for all-weather access. New 69kV poles will need to be placed to reroute the existing line to tie into the new breaker site. The old poles will not be removed as they provide an emergency alternate connection to the mine if there is a problem with the breaker.

- b. Fencing, welding, concrete work, grading, permanent foundations, and road building will be expected on Federal Lands in order to construct the breaker site. The pole line and fiber optic installation will not require these types of activities.
- c. Soils and geology in the area are suitable for placement of the power line and isolation breaker site.
- d. The fiber optic line will be strung on 12 foot wooden or fiberglass cross arms that will be replacing the existing distribution conductor connections. See attached Exhibit C for 69kV pole design. The 24 count ADSS fiber line will be under-built on existing 69kV poles. Some poles may need to be replaced to allow NESC ground clearance requirements.

4. Additional Components

- a. Any equipment storage areas will be located on private land.
- b. The isolation breaker is needed to provide operational protection to the UNSE system interconnection that will connect the new gas-fired turbine generator being constructed by the Mercator Mine. The breaker site will also include a new metering point for the mine. The existing metering point on mine property will be removed.
- c. The fiber optic line is to provide internal communications and control to the breaker equipment by UNSE operations. A fiber line will be built from the mine to the breaker site and this segment will be owned and operated by the mine. The mine will be seeking a permit for this line under separate cover.

5. Government Agencies Involved

- a. A Mohave County road permit will be applied for once a BLM permit is acquired and a construction schedule has been determined. Typically, the time to acquire this permit is about 1 week. This time frame may be longer for the driveway access point to the new breaker site.
- b. An Arizona State Trust Lands application has been filed to allow for the installation of the fiber optic line. UNSE will endeavor to have this permit fast-tracked or get permission to install the fiber line before the standard application processing time of 12 months.

6. Construction of Facilities

- a. Breaker site construction will begin once all equipment has been received from suppliers. The site will be cleared of vegetation and graded. The ground grid will be placed at a depth of 18 inches with connections above ground for bonding the fence and utility facilities to the ground grid. Foundations will be dug and concrete poured for the poles and equipment within the site. A seven foot chain link fence with razor wire will be installed along the perimeter. Two 16 foot gates in the fence will match the new driveways to Mineral Park Road.
- b. The existing hip bracket attachments for the distribution line will be removed and replaced with 12 foot fiberglass cross arms. Note: The appearance of the fiberglass at street level will be the same as wood arms. The fiber optic line will be strung on the new cross arms. Similar to electric conductor construction a p-line will be pulled into a specialized attachment bracket on each cross arm then the p-line will pull the fiber optic line into place from a reel on a cable trailer. It is anticipated the line can be pulled in one run but it may need to be done in 1 mile increments. The fiber line will then be tensioned and snapped into place. The fiber will be terminated at the breaker site.
- c. It was determined to place the fiber line in an underbuild position rather than bury the line because of soil disturbance and cost. The existing pole heights dictate a particular cross-arm configuration to install the fiber optic line as underbuilt. This configuration has raptor protection issues so phase covers will need to be installed on the cross-arms to create a raptor proof design. The placement of phase covers is depicted on Exhibit C-1. This option was deemed more cost effective than replacing each pole with a much taller structure to meet another raptor proof design. Note: The cost of installing a taller pole is approximately \$7500 while the cost of placing phase covers, 2 per pole, would be \$200.
- d. The construction vehicles will be driving overland pole to pole and some vegetation will be disturbed. Vegetation such as cactus, Joshua trees, yucca, will be avoided where possible and transplanted if avoidance is not feasible.
- e. UNSE construction crews adhere to all applicable OSHA standards. This includes personal protective equipment [PPE] and equipment operation. Documented tailboard meetings are held daily before any construction is commenced and when new personnel arrive at the work site to discuss aspects of the project and review hazards and any mitigation and safety concerns about individual tasks.
- f. Disposal of all liquid or solid waste produced during operation on this right-of-way shall be in an approved manner so it will not impact the air, soil, water, vegetation, and animals. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste

disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

- g. UNSE shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release of spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

7. Resource Values and Environmental Concerns

- a. It is anticipated a cultural survey will be done by BLM personnel.
- b. If during construction any previously unidentified historic or prehistoric cultural resources are found, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery, and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).
- c. It is anticipated biological evaluation will be done by BLM personnel.

8. Stabilization and Rehabilitation

Disturbed areas around the poles and guy anchor assemblies will be raked to scarified and allow natural seeding to occur.

9. Operation and Maintenance

A service truck will be dispatched to investigate outages on an as-needed basis. Typically to determine the cause of a line outage if such occurs.

10. Termination and Restoration

Upon termination of the right-of-way, all improvements will be removed within ninety (90) days. Disturbed areas will be ripped to a depth of 2" to promote natural seeding.

UNSE acknowledges that in the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part 2800, including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.

EXHIBIT A
Breaker site and
additional RW strip

changed to
new location & 45' W side
DETAIL OF R/W
STA. 102+22.4
Scale 1" = 200'

35 x 330 foot
additional RW area

STA. 102+22.4
ENTER DUVAL PROPERTY

PROPOSED 69KV
TRANSMISSION LINE

PROPOSED R/W LINE
CITIZENS UTILITIES CO.

N 39° 22' E
ROAD R/W
COUNTY ROAD
16" DUVAL PIPELINE
ROAD & PIPE LINE R/W

Fd. Copperweld
Marker

TAN 3
(M.S. 4592)

60 x 120 foot
breaker site

PATENTED MINING CLAIM
DUVAL SULPHUR
B.
POTASH COMPANY

TAN 1

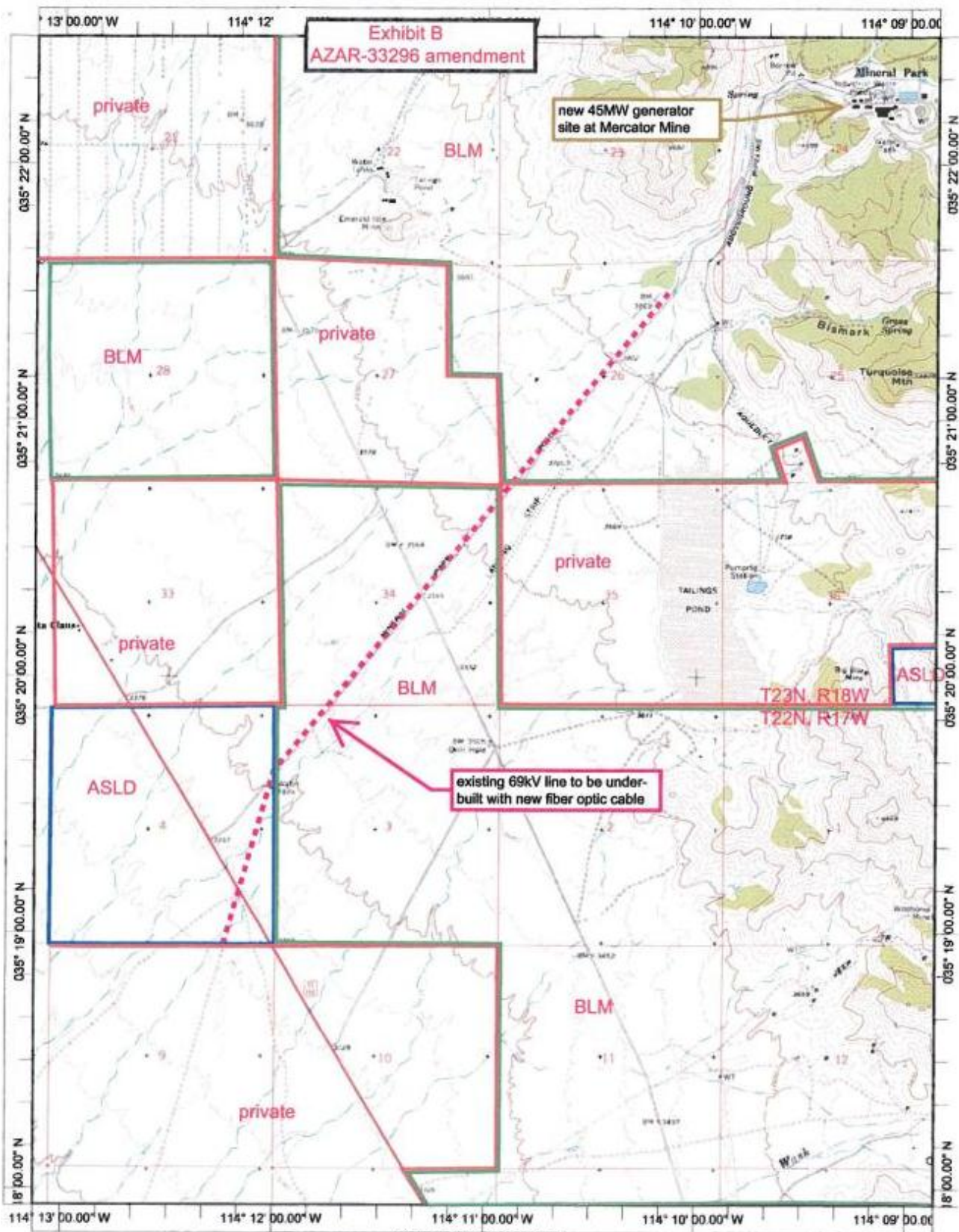
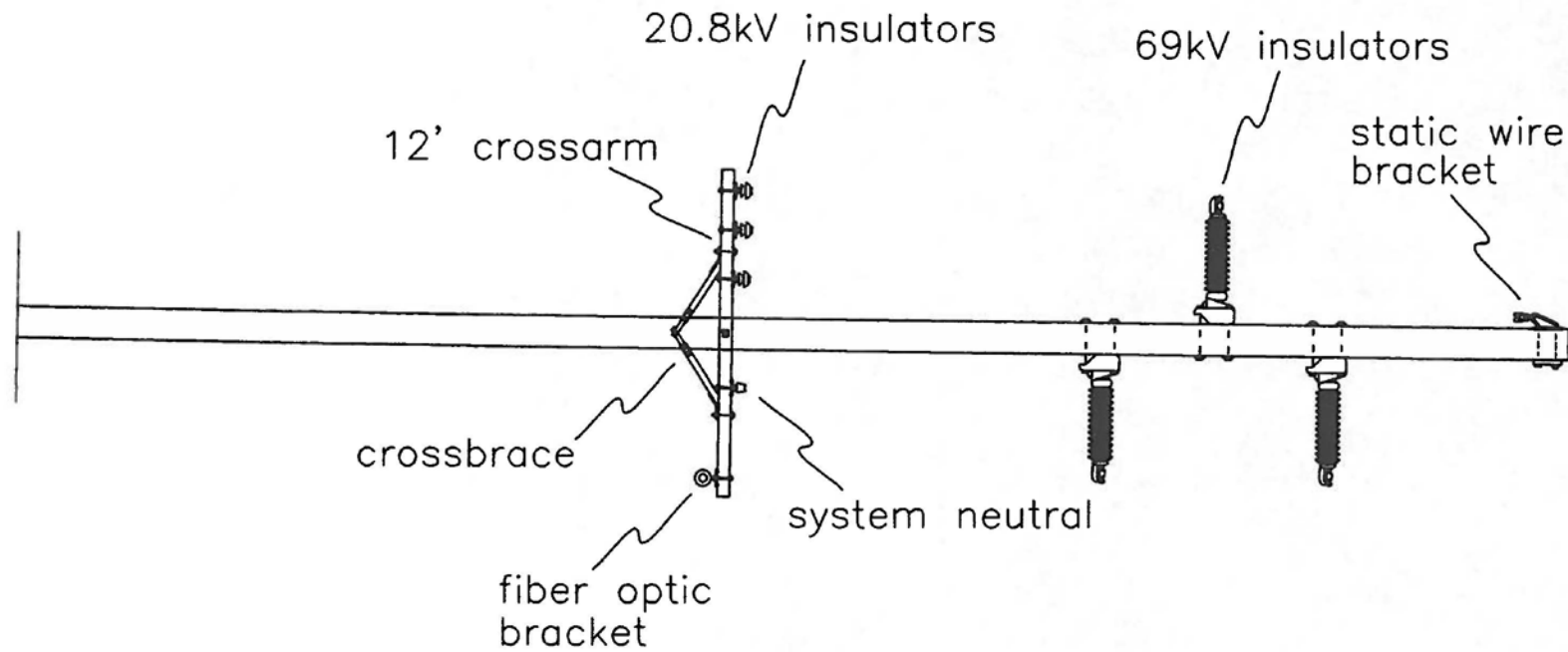


EXHIBIT C



TAILBOARD					STATE	DISTRICT	TASK NO.
DISCUSSED JOB: <input type="checkbox"/>						KINGMAN	
FOREMAN'S SIGNATURE		Scale: NONE Date: _____ Drawn by: _____			COUNTY	DETAIL MAP NO.	WORK ORDER NO.
					MOHAVE		

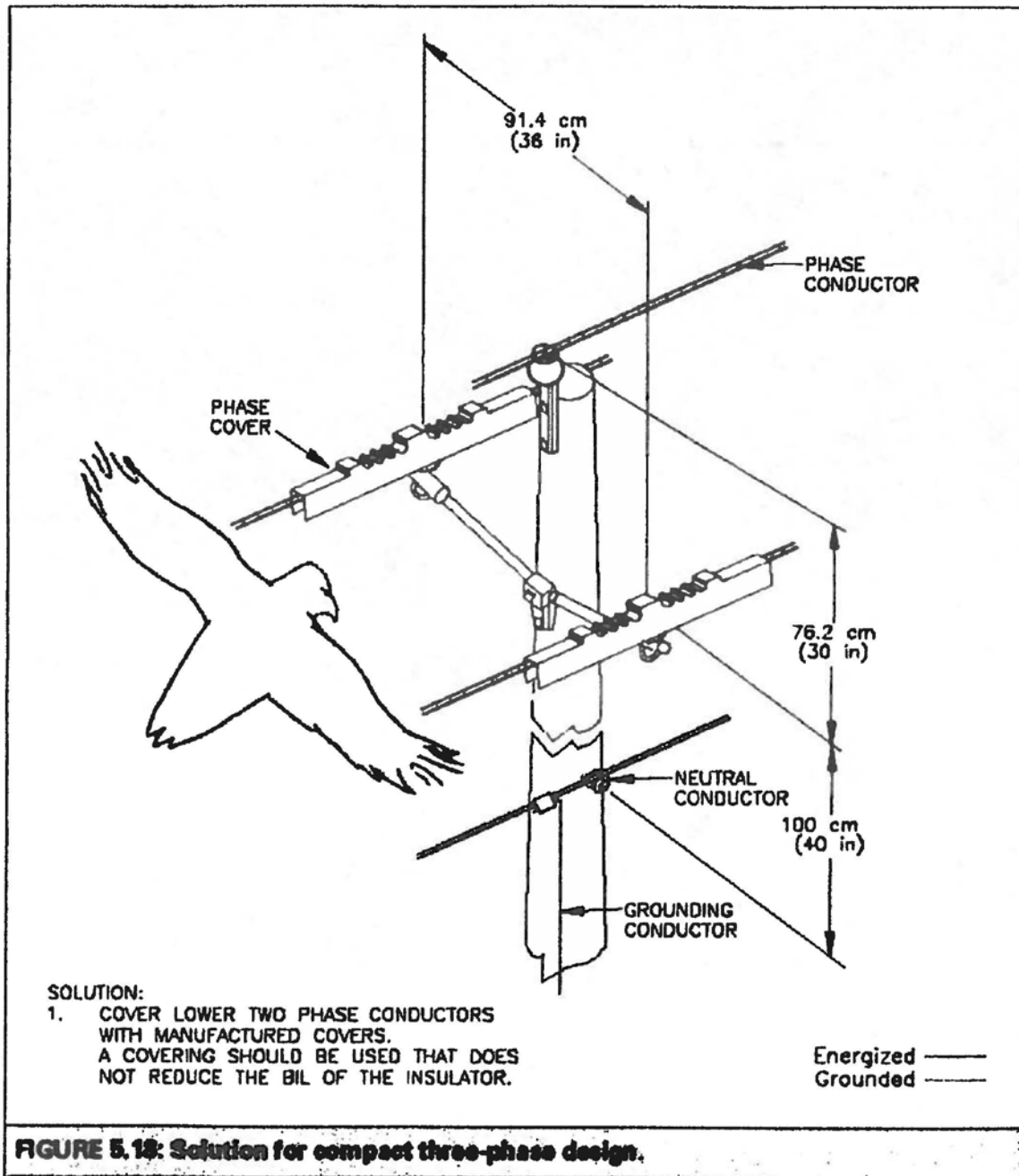


Exhibit C-1
Phase cover diagram



EXHIBIT D
DESERT TORTOISE HANDLING
GUIDELINES

1. Stop your vehicle and allow the tortoise to move off the road.
2. If the tortoise is not moving, gently** pick up the tortoise and move it approximately 200 feet off the road to a shaded location.
 - a. **Do not** turn the tortoise over.
 - b. Move the tortoise in the direction it was traveling. If it was crossing the road, move it in the direction it was crossing.
 - c. Keep the tortoise within 12-18 inches of the ground, move slowly so as not to cause it to become alarmed.
 - d. Release the tortoise under the shade of a bush or rock.

** Tortoise store water in their bladder. If a tortoise becomes alarmed its defense is to void its bladder onto the captor. This could lead to dehydration of the tortoise and potentially to death.
3. Prior to moving any parked vehicle or equipment at the project site check for tortoise under the vehicles.

Mineral Park Project Fiber Optics and Distribution Line Right of Way Application, June 29, 2011

Project Description

Mineral Park Inc. (MPI) requests a 30-foot wide grant of right-of-way (ROW) across Bureau of Land Management (BLM) land to construct, operate and maintain a fiber optics communication line from an isolation breaker site owned by UNS Electric along Mineral Park Road to the Mineral Park Mine as well as a 13.2 KV distribution power line from Pole 39 to the mine.

The fiber optics line will be attached as an under build to existing structures as shown on the attached map (Exhibit C) and described from the breaker site to the mine by pole/structure numbers as follows:

<u>Pole#</u>	<u>Description</u>	<u>Owner</u>
45,46	69KV line	UNS Electric
44	New pole & anchor	MPI
40-43	69KV line	UNS Electric
39	13.2KV distribution line	MPI
38A	New Pole & Regulators	MPI
13-38	13.2KV distribution line	MPI

MPI owns the Mineral Park Mine (the Mine) located approximately 16 miles northwest of Kingman, Mohave County, Arizona. The proposed ROW alignment crosses BLM and private land jurisdictions. The legal description of the proposed ROW across BLM land includes Sections 23, 24, 26 T23N, R18W, Gila Salt River Baseline and Meridian. This project will be referred to as the Mineral Park Mine Fiber Optics and Distribution Line Right-of-Way Project (see attached maps, Exhibit C).

The Mine is moving forward with plans to expand the operations which will ultimately require an additional 33.5 mega watts of daily power. Due to constraints of the existing power supply system, a private power generating station will be installed at the Mine. The proposed ROW would allow communication and control from the metering/breaker site owned by UNS located in T23N, R18W, Sec.26: NE4, across federal and private lands in Sections 23, 24 and 26, to the power generating station located on private land at the Mine. Mineral Park's power generating facility for the mine's expanding mining operations require the communication and control between the metering/breaker site and the power generating facility. Therefore, in order to communicate between the two parcels there is no other feasible alternative other than crossing BLM land.

The project involves installation of the fiber optics line from the UNS metering/breaker site to the mine on existing structures including the 69KV line owned by UNS and the distribution line owned by MPI. The project includes approximately 1.5 miles located on BLM land with the remaining portion located on private land. The ROW alignment on federal lands follows the Mineral Park Road at poles 40-46 and is along the distribution line at poles 13-39 to the mine. As previously described the fiber optics line will be attached to existing structures/poles, with the exception of pole 44 as shown on the map which is required to cross the Mineral Park road with the appropriate clearance for the fiber optics line. In addition, pole 38A will be erected on the 13.2 KV distribution line as a new pole with regulators. The construction, access and maintenance will utilize existing the access maintenance road for the 69KV line and 13.2 KV distribution line. It will not be necessary to create new disturbance other than for the installation of poles 38A and 44, which

than for the installation of poles 38A and 44, which will be done in previously disturbed areas. After the completion of the installation of the poles, the disturbed area will be re-contoured and graded within this right-of-way area where a road exists for maintaining the existing infrastructure.

Temporary staging areas will not be required on BLM land. Project construction is anticipated to be completed in the third quarter of 2011. The fiber optics and distribution line would operate year round for the life of the mine. In the event it is required, a Mohave County road permit will be applied for once a BLM permit is acquired and construction schedule is determined, which typically is obtained within a week. Upon mine closure and/or cessation of mining activities, the fiber optics and distribution line would be reclaimed or may be utilized for additional purposes as needed .

Supplemental:

A cost recovery account has been established for processing the Application for Partial Assignment of AZAR 32609. The required supplemental information has been provided with that Application. In addition, the Corporate Resolution for processing of this ROW application, is attached to the Gas Line Right of Way Application filed in May 2011.

There are no related right of way or temporary use permit applications or previous applications. All federal lands affected by this application are included.

*Mineral Park Mine Fiber Optics & Distribution Line Right-of-Way Project
Standard Form 299 Application*

EXHIBIT A

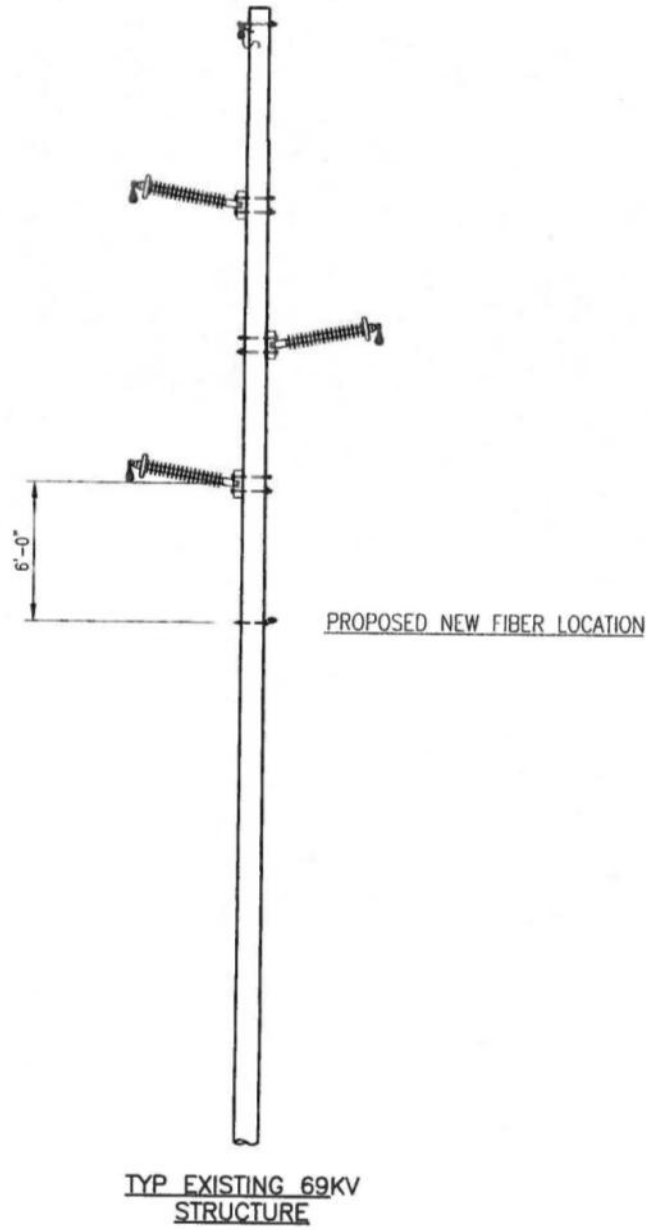
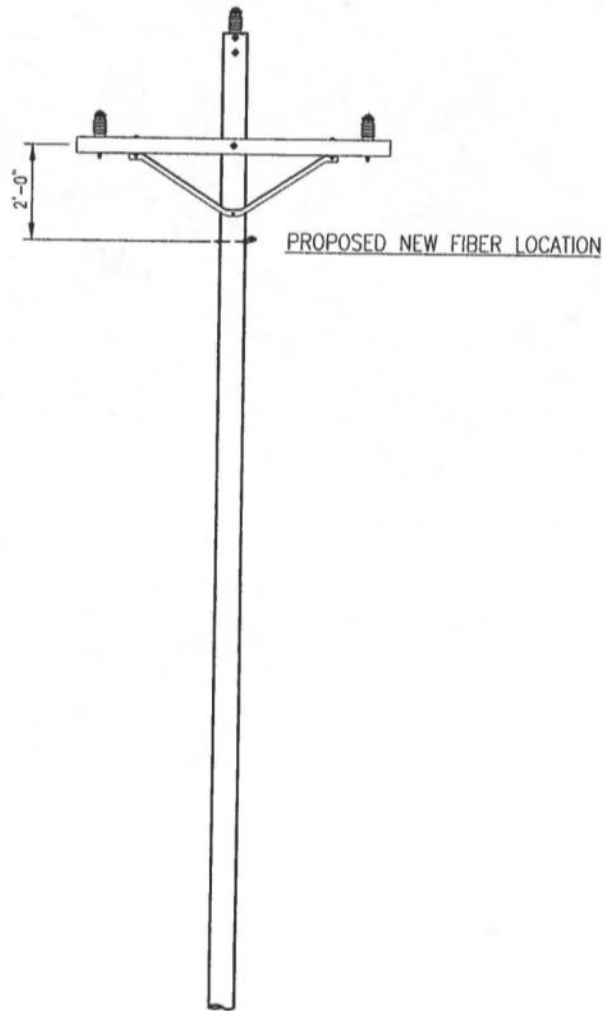
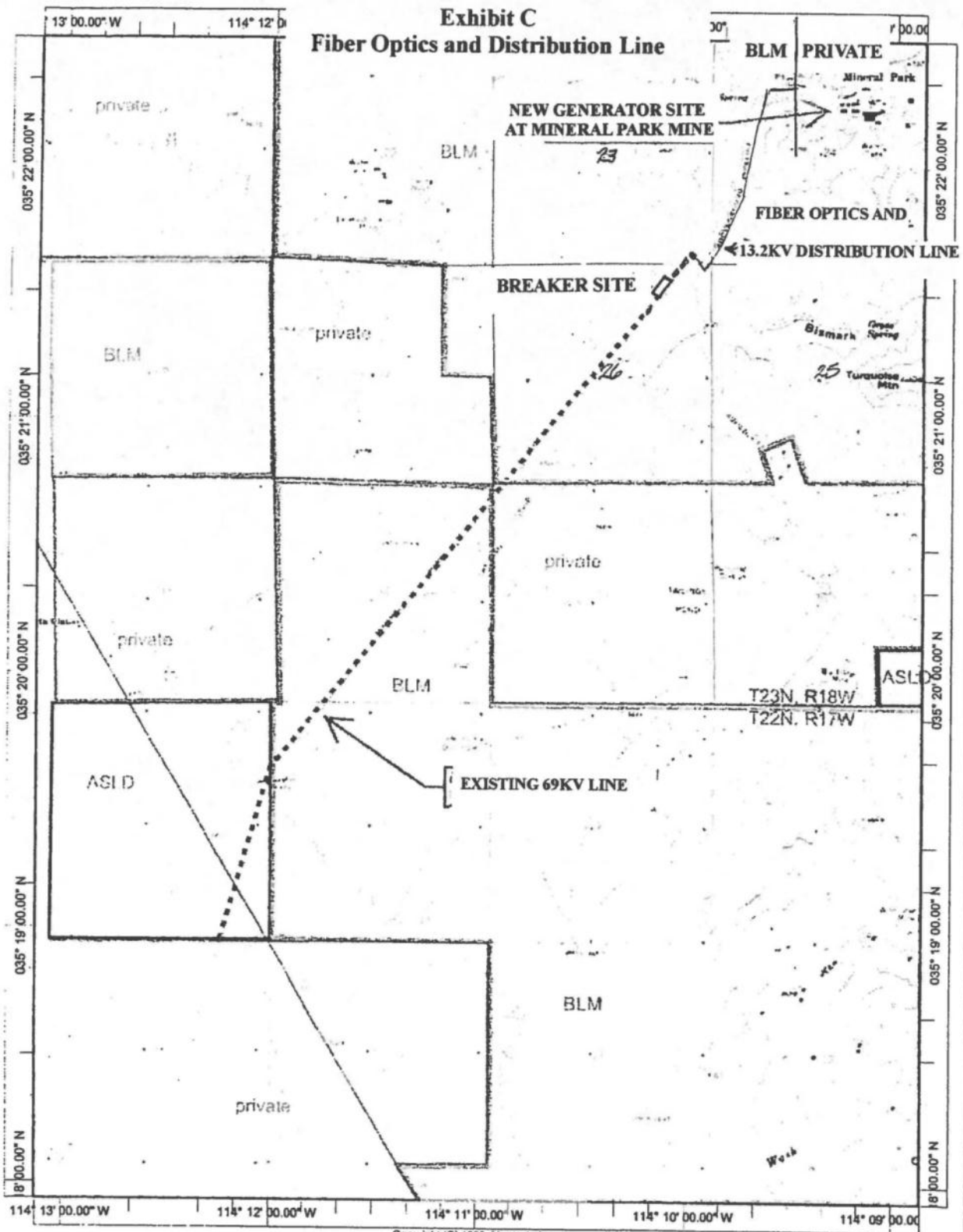


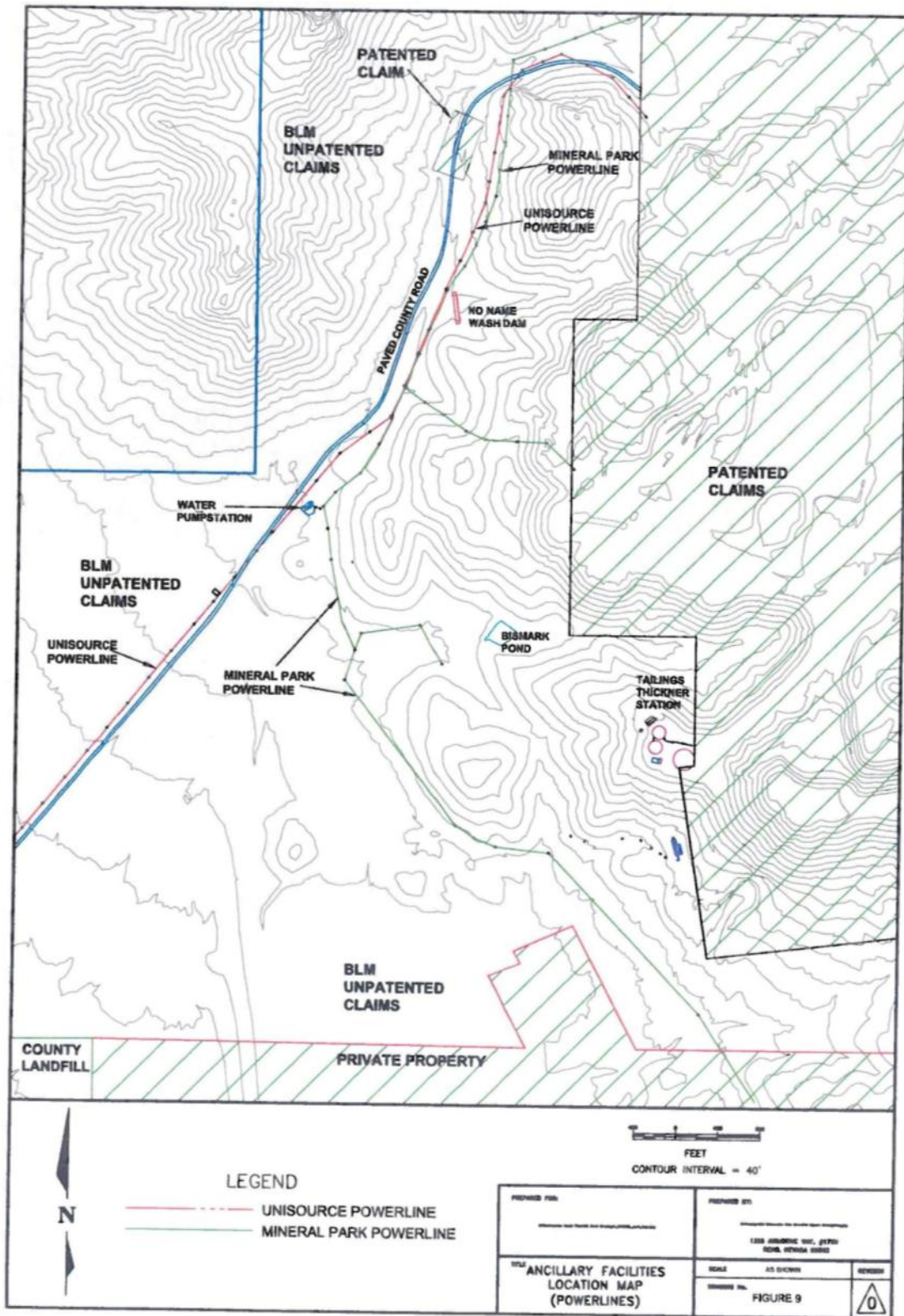
EXHIBIT B



TYP. EXISTING 13.2 KV
STRUCTURE

Exhibit C
Fiber Optics and Distribution Line





Len Marceau recommends “Shale
Green” /s/ Len Marceau 9/21/2011



UNITED STATES DEPARTMENT
OF THE INTERIOR BUREAU OF
LAND MANAGEMENT
RIGHT-OF-WAY GRANT/TEMPORARY USE PERMIT

SERIAL NUMBER AZA 35757

1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

2. Nature of Interest:

a. By this instrument, the holder:

Mineral Park, Inc.
8275 North Mineral Park Road
Golden Valley, Arizona 86413

receives a right to construct, operate, maintain, and terminate a 13.2 kV power line on public lands (or Federal lands for MLA Rights-of-Way) described as follows:

Gila and Salt River Meridian, Arizona

T. 23 N., R. 18 W.,
sec. 23, M.S. 4592;
sec. 24, lots 8, 9, 10, 11, 16, 17;
sec. 25, lots 22, 23, 25, 26;
sec. 26, M.S. 4592.

b. The right-of-way or permit area granted herein is 30 feet wide, 2.944 miles long, and contains 10.707 acres, more or less.

c. This instrument will terminate on December 31, 2041 unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

- e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations parts 2800 and 2880.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise dispose of as directed by the authorized officer.
- c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, plans, maps, or designs set forth in Exhibit(s) A and B, dated September 12, 2011 attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)

(Signature of Authorized
Officer)

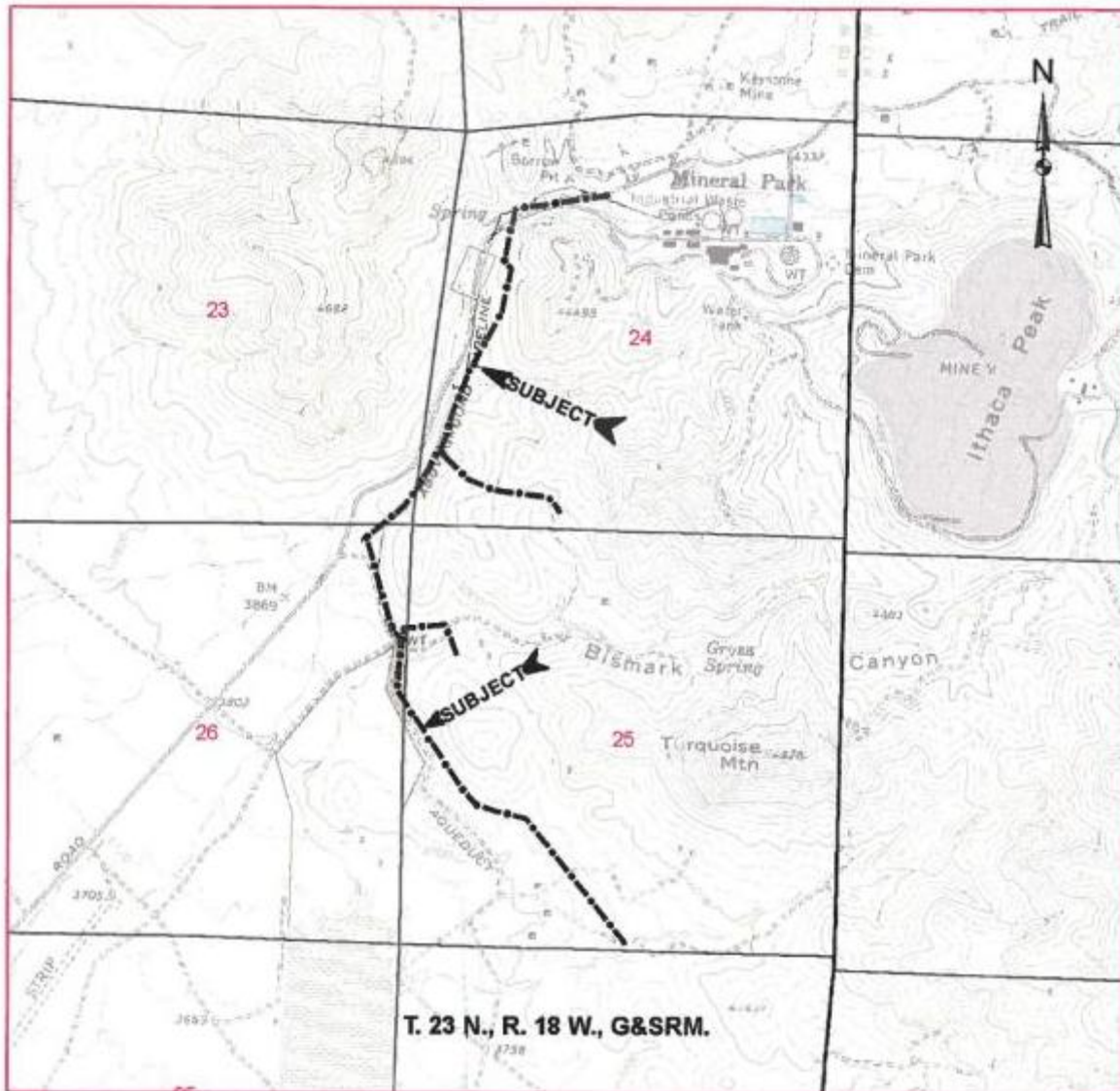
(Title)

(Title)

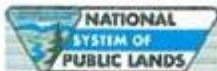
(Date)

(Effective Date of Grant)

**AZA 35757
EXHIBIT A
September 12, 2011**



0 0.25 0.5 1 Miles



No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

LEGEND

LAND OWNERSHIP/ADMINISTRATION





-  Subject Power Line
-  Bureau of Land Management
-  Private
-  State Trust

EXHIBIT B
AZA35757
September 12, 2011

A. CONSTRUCTION, OPERATION, AND MAINTENANCE

1. The holder will conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way except for the plant salvage as described in item A (6) of this exhibit.
2. Prior to excavation, the holder will locate and avoid buried utilities.
3. Unless otherwise agreed to by the Authorized Officer in writing, powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 2006. The Holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "eagle safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modifications or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the Holder without liability or expense to the United States.
4. The holder shall use non-reflecting lines and conductors
5. The holder will remove only the minimum amount of vegetation necessary for the construction, operation, maintenance, and termination of the road.
6. The holder will protect all survey monuments. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments and civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of these by the holder or anyone operating on his behalf, the holder will immediately report the incident to the authorized officer and the respective installing agency (if known) in writing. The holder will be responsible for the restoration of the monument(s) in a manner suitable to the authorized officer after consultation with all parties involved. If Bureau cadastral or other Federal surveyors are used to restore the monument(s), the holder will be liable to the United States for the costs.
7. All cacti, yucca, nolina (beargrass), ocotillo, agave or other state protected plants on public lands will be avoided where possible. Where they cannot be avoided the holder will transplant them on public lands within 15 feet of this right-of-way. The plants will be transplanted by hand, the same day that they are uprooted.

AZA 35757 Exhibit B, p.2 of 3

8. The holder shall minimize disturbance to existing improvements on public land. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them.

9. The holder will not violate applicable air and water quality standards or related facility siting standards established by or pursuant to applicable Federal and State law.

10. The holder will limit excavation to the areas of construction. No borrow areas for fill material will be permitted on the site. All waste material resulting from construction or use of the site by the holder will be removed from the site.

11. No blading of the right-of-way for construction and maintenance is permitted.

12. Construction holes left open over night shall be covered. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through and into a hole.

13. No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.

14. The holder of this right-of-way agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on this right-of-way (unless the release or threatened release is wholly unrelated to Holder's activity in this right-of-way). This agreement applies without regard to whether a release is caused by the holder, their agent, or unrelated third parties.

15. Discovery of cultural resources in the absence of monitoring: If, in its operations, operator discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery, and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

16. This right-of-way is subject to the following:

Right-of-way AZA 22631 for a road, granted to Mohave County Board of Supervisors, its successors and assigns, pursuant to section 501 of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1761);

Right-of-way AZA 28693 for a buried telephone line, granted to Citizens Utilities Rural, Company, its successors and assigns, pursuant to section 501 of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1761);

All rights existing at the time this amendment is granted.

B. TERMINATION

1. Ninety days prior to termination of the right-of-way, the holder will contact the Authorized Officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surfacing material, recontouring, topsoiling, or seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination actions.

UNITED STATES DEPARTMENT
OF THE INTERIOR BUREAU OF
LAND MANAGEMENT
RIGHT-OF-WAY GRANT/TEMPORARY USE PERMIT

SERIAL NUMBER AZA 35723

1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).
2. Nature of Interest:
 - a. By this instrument, the holder:

Mineral Park, Inc.
8275 North Mineral Park Road
Golden Valley, Arizona 86413

receives a right to construct, operate, maintain, and terminate a fiber optic line on public lands (or Federal lands for MLA Rights-of-Way) described as follows:

Gila and Salt River Meridian, Arizona

T. 23 N., R. 18 W.,
sec. 23, M.S. 4592;
sec. 24, lots 8, 9, 10, 11, 16, 17;
sec. 26, M.S. 4592, NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$.
 - b. The right-of-way or permit area granted herein is 12 feet wide, 1.660 miles long, and contains 2.414 acres, more or less.
 - c. This instrument will terminate on December 31, 2014 unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
 - d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

- e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations parts 2800 and 2880.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise dispose of as directed by the authorized officer.
- c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, plans, maps, or designs set forth in Exhibit(s) A and B, dated September 12, 2011 attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)
Authorized

(Title)

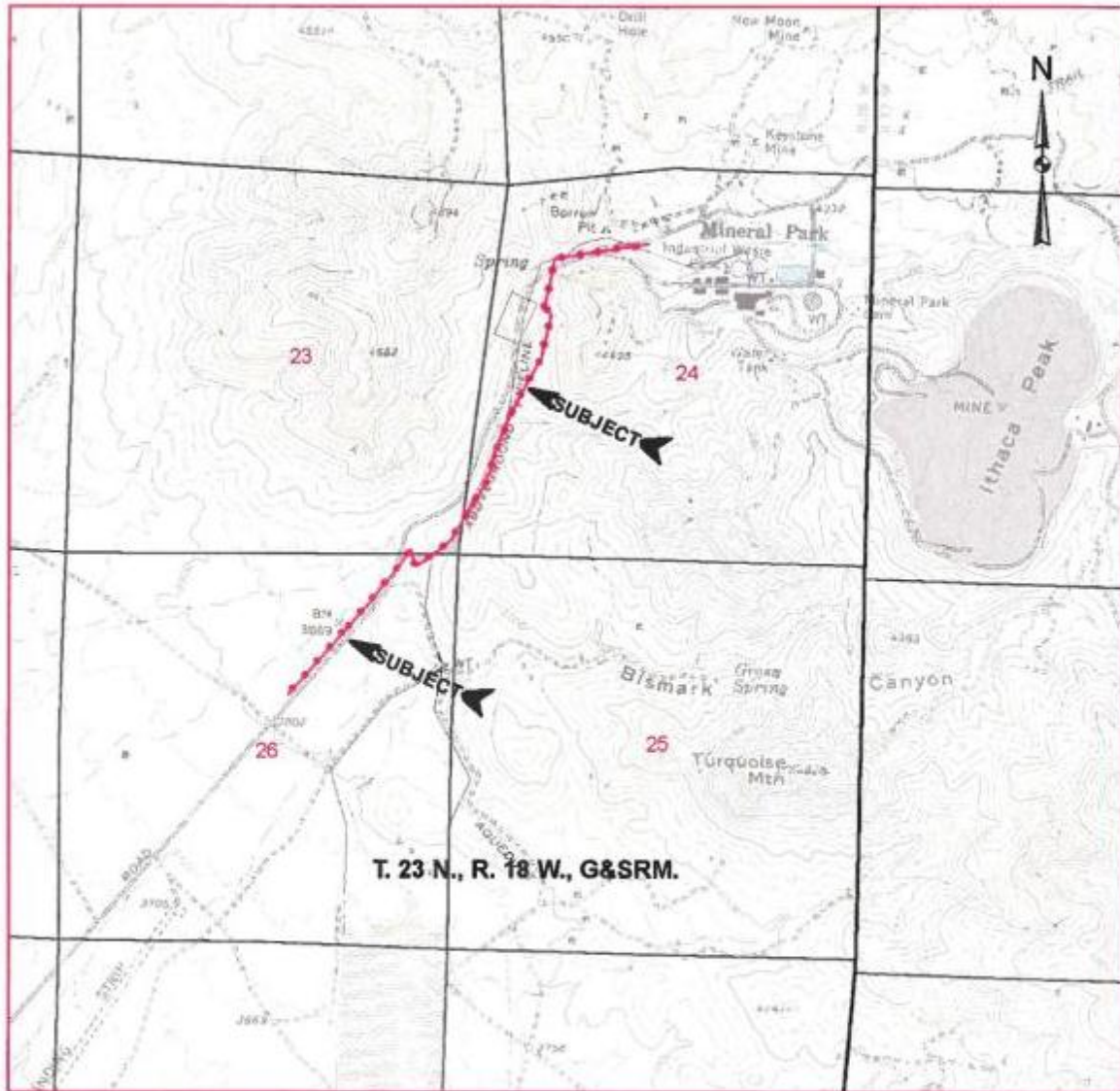
(Date)

(Signature of
Officer)

(Title)

(Effective Date of Grant)

AZA 35723
EXHIBIT A
September 12, 2011



0 0.25 0.5 1 Miles



No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

LEGEND

LAND OWNERSHIP/ADMINISTRATION

-  Subject Fiber Optic Line
-  Bureau of Land Management
-  Private
-  State Trust

EXHIBIT B
AZA35723
September 12, 2011

A. CONSTRUCTION, OPERATION, AND MAINTENANCE

1. The fiber optics line or the use of it authorized under this amendment is not to be leased, rented, or assigned to other parties without prior written approval from the authorized officer.
2. The holder will conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way except for the plant salvage as described in item A (6) of this exhibit.
3. Prior to excavation, the holder will locate and avoid buried utilities.
4. The holder will remove only the minimum amount of vegetation necessary for the construction, operation, maintenance, and termination of the road.
5. The holder will protect all survey monuments. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments and civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of these by the holder or anyone operating on his behalf, the holder will immediately report the incident to the authorized officer and the respective installing agency (if known) in writing. The holder will be responsible for the restoration of the monument(s) in a manner suitable to the authorized officer after consultation with all parties involved. If Bureau cadastral or other Federal surveyors are used to restore the monument(s), the holder will be liable to the United States for the costs.
6. All cacti, yucca, nolina (beargrass), ocotillo, agave or other state protected plants on public lands will be avoided where possible. Where they cannot be avoided the holder will transplant them on public lands within 15 feet of this right-of-way. The plants will be transplanted by hand, the same day that they are uprooted.
7. The holder shall minimize disturbance to existing improvements on public land. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them.
8. The holder will not violate applicable air and water quality standards or related facility siting standards established by or pursuant to applicable Federal and State law.

9. The holder will limit excavation to the areas of construction. No borrow areas for fill material will be permitted on the site. All waste material resulting from construction or use of the site by the holder will be removed from the site.

10. No blading of the right-of-way for construction and maintenance is permitted.

11. Construction holes left open over night shall be covered. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through and into a hole.

12. No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.

13. The holder of this right-of-way agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on this right-of-way (unless the release or threatened release is wholly unrelated to Holder's activity in this right-of-way). This agreement applies without regard to whether a release is caused by the holder, their agent, or unrelated third parties.

14. The Holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release of spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

15. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the secretary of the Interior. Prior to the use of pesticides, the Holder shall obtain from the Authorized Officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the Authorized Officer. Emergency use of pesticides shall be approved in writing by the Authorized Officer prior to such use.

16. Discovery of cultural resources in the absence of monitoring: If, in its operations, the holder or its representative discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed.

In the absence of an approved plan, the BLM will evaluate the significance of the discovery, and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

17. This right-of-way is subject to the following:

Right-of-way AZA 22631 for a road, granted to Mohave County Board of Supervisors, its successors and assigns, pursuant to section 501 of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1761);

Right-of-way AZA 28693 for a buried telephone line, granted to Citizens Utilities Rural, Company, its successors and assigns, pursuant to section 501 of the Federal Land Policy and Management Act (FLPMA)(43 U.S.C. 1761);

All rights existing at the time this amendment is granted.

B. TERMINATION

1. Ninety days prior to termination of the right-of-way, the holder will contact the Authorized Officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surfacing material, recontouring, topsoiling, or seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination actions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RIGHT-OF-WAY GRANT/TEMPORARY USE PERMIT

SERIAL NUMBER AZAR 33296 Amendment #2

1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

2. Nature of Interest:

a. By this instrument, the

holder: UNS Electric, Inc.
P.O. Box 3099
Kingman, Arizona 86402-3099

receives a right to construct, operate, maintain, and terminate a 20.8 kV under build power line, 20.8kV freestanding power line, a fiber optic line under build, and an isolation breaker site on public lands (or Federal lands for MLA Rights-of-Way) described as follows:

Gila and Salt River Meridian, Arizona

T. 22 N., R. 18
W., sec. 3,
lot 4.

T. 23 N., R. 18 W.,
sec. 26, $W\frac{1}{2}SW\frac{1}{4}NE\frac{1}{4}$, $SE\frac{1}{4}SE\frac{1}{4}NW\frac{1}{4}$, $SE\frac{1}{4}SE\frac{1}{4}NW\frac{1}{4}$,
 $NE\frac{1}{4}SW\frac{1}{4}$, $SE\frac{1}{4}NW\frac{1}{4}SW\frac{1}{4}$, $SW\frac{1}{4}SW\frac{1}{4}$, $NE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$;
sec. 34, $E\frac{1}{2}NE\frac{1}{4}$, $SW\frac{1}{4}NW\frac{1}{4}NE\frac{1}{4}$, $SW\frac{1}{4}NE\frac{1}{4}$, $E\frac{1}{2}NE\frac{1}{4}NW\frac{1}{4}$.

b. The right-of-way or permit area granted herein for the isolation breaker 45 feet wide, 330 feet long, and contains 0.341 acres, more or less. The right-of-way or permit area granted herein for the freestanding power line is 25 feet wide, 2845 feet long, and contains 1.633 acres, more or less. These additional areas to AZAR 33296 aggregates 1.974 acres, more or less. The right-of-way area for the power line under build is approximately 1.379 miles in length, and the fiber optic line under build is approximately 2.384 miles in length and these are within the existing right-of-way area.

- c. This instrument will terminate July 6, 2016, unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
- d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
- e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations parts 2800 and 2880.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise dispose of as directed by the authorized officer.

- c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, plans, maps, or designs set forth in Exhibit(s) A B, C, D, E, and F dated September 12, 2011 attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)

(Title)

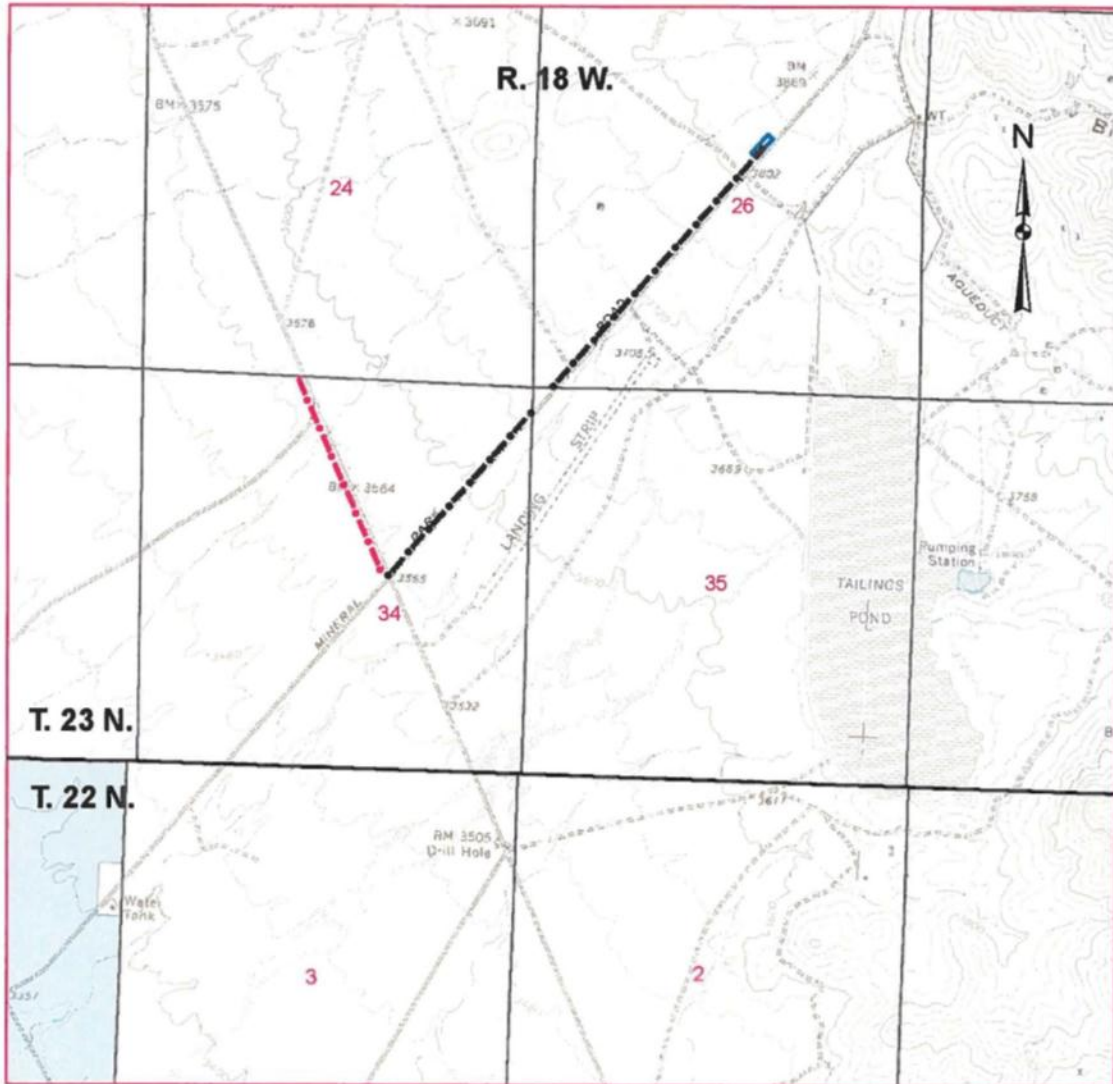
(Date)

(Signature of Authorized
Officer)

(Title)

(Effective Date of Grant)

AZAR 33296 Amendment #2
EXHIBIT A
September 12, 2011



0 0.25 0.5 1 Miles

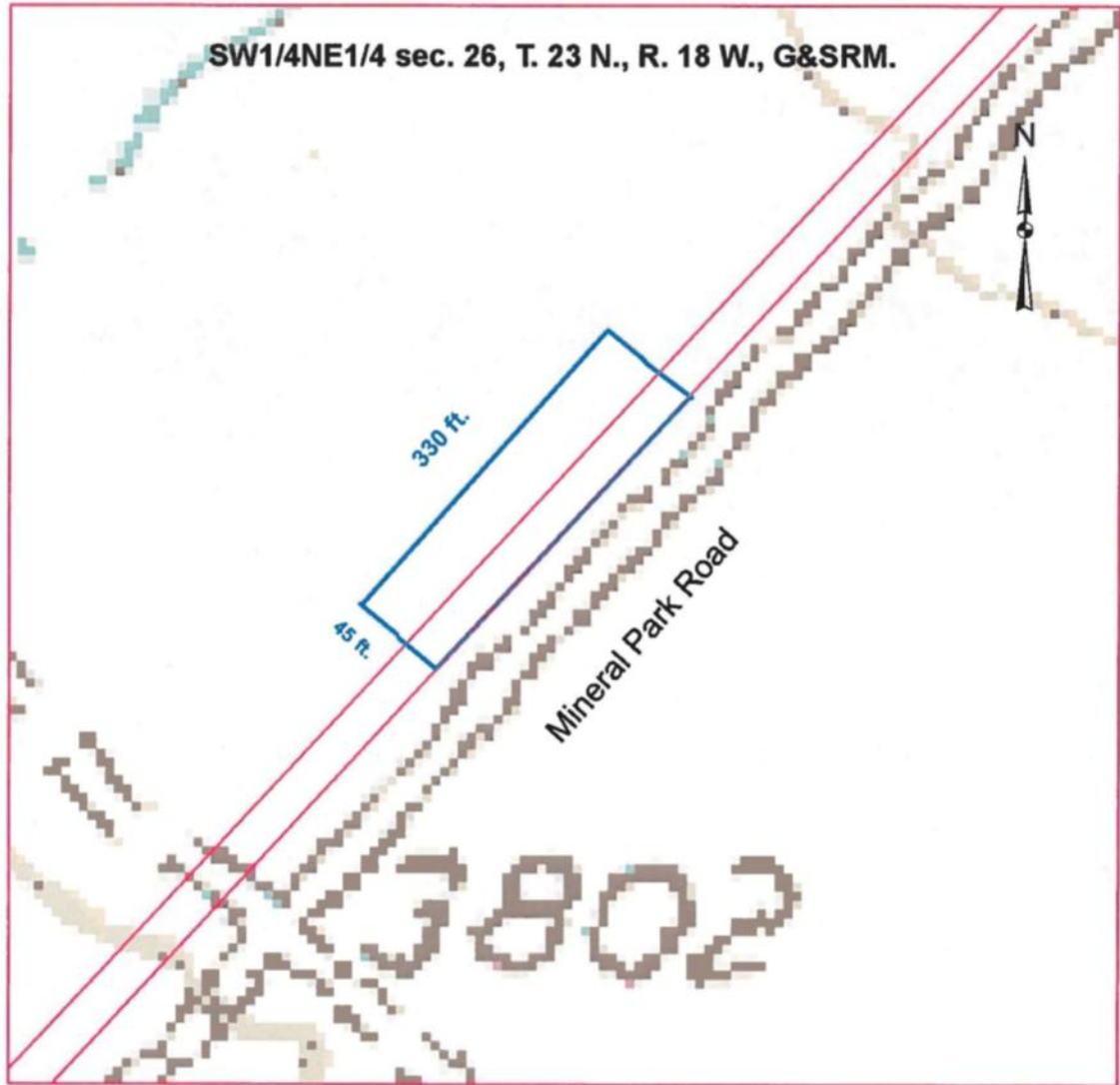


No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

LEGEND

- | | |
|---|---|
| Subject Power Line Right-of-Way Underbuild Portion | LAND OWNERSHIP/ADMINISTRATION
Bureau of Land Management
Private
State Trust |
| Subject Power Line Right-of-Way Stand Alone Portion | |
| Breaker Site | |

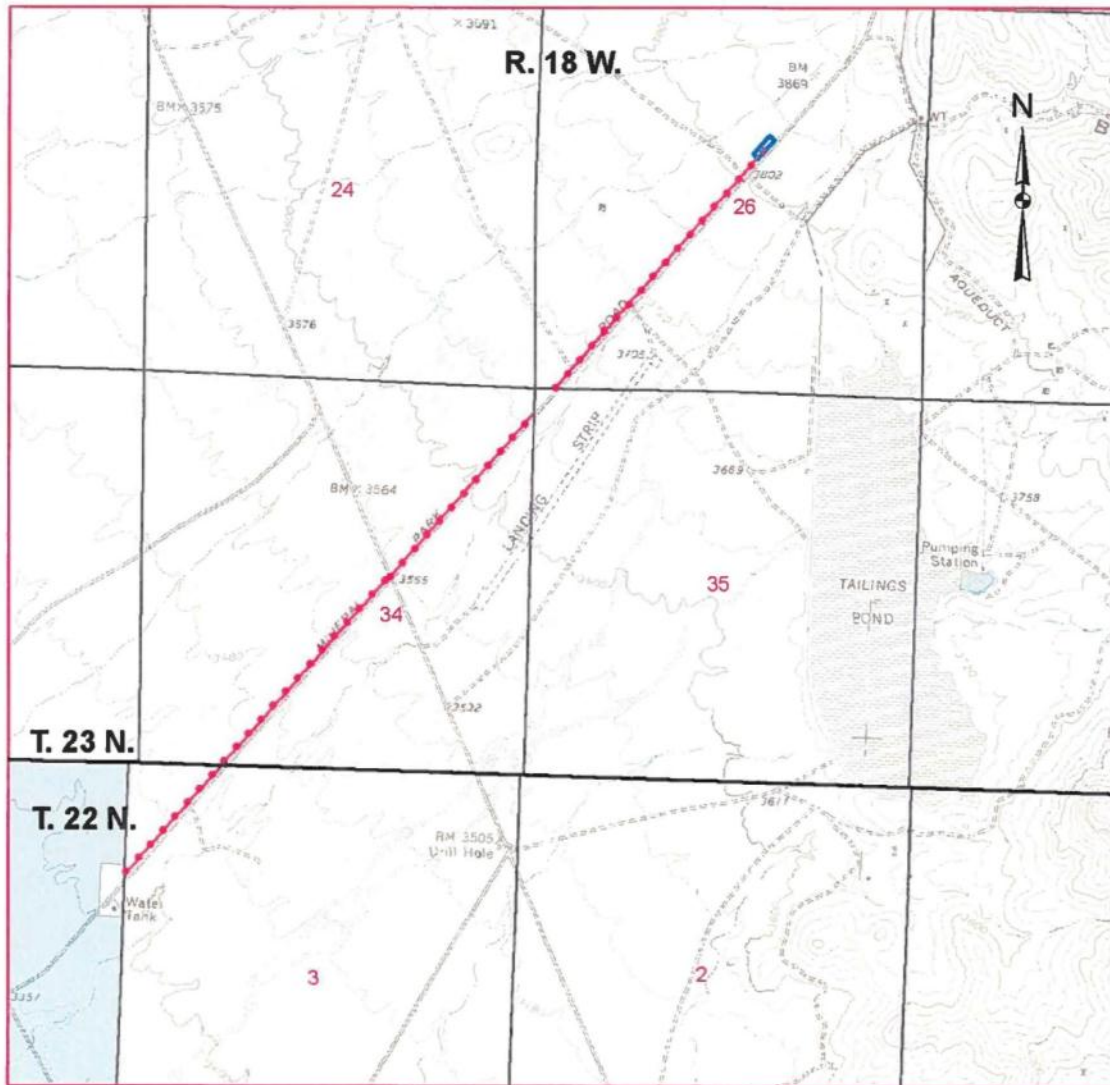
AZAR 33296 Amendment #2
EXHIBIT B
September 12, 2011



No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.



**AZAR 33296 Amendment #2
EXHIBIT C
September 12, 2011**



0 0.25 0.5 1 Miles



No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

LEGEND

- | | |
|---------------------------------------|--------------------------------------|
| Subject Fiber Optic Line Right-of-Way | LAND OWNERSHIP/ADMINISTRATION |
| Breaker Site | Bureau of Land Management |
| | Private |
| | State Trust |

EXHIBIT D
AZAR 33296 Amendment #2
September 12, 2011

A. CONSTRUCTION, OPERATION, AND MAINTENANCE

1. The holder will paint the equipment shelter at the isolation breaker site authorized herein the color "Shale Green" as shown on Exhibit E. The microwave dish antenna and cover will be painted gray. Non-glare, non-reflective, non-chalking paint will be used.
2. The fiber optics line or the use of it authorized under this amendment is not to be leased, rented, or assigned to other parties without prior written approval from the authorized officer.
3. The holder will conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way except for the plant salvage as described in item A (11) of this exhibit.
4. The right-of-way for the electric lines authorized herein does not include an access road. Access for these electric lines will primarily be directly from Mineral Park Road and the Old Boulder Highway and except for occasional activities is not to occur in a manner in which vehicle travel is parallel with these roads.
5. Unless otherwise agreed to by the Authorized Officer in writing, powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 2006. The Holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "eagle safe." The BLM reserves the right to require modifications or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the Holder without liability or expense to the United States.
6. The holder will protect all survey monuments. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey comers, reference comers, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments and civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of these by the holder or anyone operating on his behalf, the holder will immediately report the incident to the authorized officer and the respective installing agency (if known) in writing. The holder will be responsible for the restoration of the monument(s) in a manner suitable to the authorized officer after consultation with all parties involved. If Bureau cadastral or other Federal surveyors are used to restore the monument(s), the holder will be liable to the United States for the costs.
7. Prior to decommissioning of that portion of the power line authorized under right-of-way AZPHX 34352 as was included in the POD for the amendment to AZAR 33296, no cross country vehicle use will be permitted until the BLM has cleared the vehicle ways and issued a written notice to proceed.

8. Prior to excavation, the holder will locate and avoid buried utilities.
9. The holder will remove only the minimum amount of vegetation necessary for the construction, operation, maintenance, and termination of the road.
10. All cacti, yucca, nolina (beargrass), ocotillo, agave or other state protected plants on public lands will be avoided where possible. Where they cannot be avoided the holder will transplant them on public lands within 15 feet of this right-of-way. The plants will be transplanted by hand, the same day that they are uprooted.
11. The holder will not violate applicable air and water quality standards or related facility siting standards established by or pursuant to applicable Federal and State law.
12. The holder will limit excavation to the areas of construction. No borrow areas for fill material will be permitted on the site. All waste material resulting from construction or use of the site by the holder will be removed from the site.
13. No blading of the right-of-way for construction and maintenance is permitted.
14. Construction holes left open over night shall be covered. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through and into a hole.
15. Discovery of cultural resources in the absence of monitoring: If, in its operations, operator discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery, and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).
16. The holder shall minimize disturbance to existing improvements on public land. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them.

17. No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.

18. The holder of this right-of-way agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on this right-of-way (unless the release or threatened release is wholly unrelated to Holder's activity in this right-of-way). This agreement applies without regard to whether a release is caused by the holder, their agent, or unrelated third parties.

19. This right-of-way amendment is subject to the following:

Right-of-way AZA 22631 for a road, granted to Mohave County Board of Supervisors, its successors and assigns, pursuant to section 501 of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1761);

Right-of-way AZA 32476 for a road, granted to the Mohave County Board of Supervisors, its successors and assigns, pursuant to section 501 of the FLPMA (43 U.S.C. 1761);

Right-of-way AZA 28693 for a buried telephone line, granted to Citizens Utilities Rural, Company, its successors and assigns, pursuant to section 501 of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1761);

All rights existing at the time this amendment is granted.

20. Upon completion of the construction of the isolation breaker authorized under this amendment the holder will provide the authorized officer with a copy of "as built" plans of the isolation breaker site and related facilities.

21. In the event that the public land underlying the ROW encompassed in this ROW, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the ROW, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part [2880], including any rights to have the Holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the ROW, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/and the Holder.

B. TERMINATION

1. Ninety days prior to termination of the right-of-way, the holder will contact the Authorized Officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surfacing material, recontouring, topsoiling, or seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination actions.

EXHIBIT E
AZAR 33296 Amendment #2
September 12, 2011



Shale Green

Note: The copy of this exhibit provided to the holder had the original paint chip attached to it.

PLAN OF DEVELOPMENT
UNS ELECTRIC, INC. (UNSE) MINERAL
PARK ISOLATION BREAKER
& FIBER OPTIC COMMUNICATION LINE
AZAR-33296- amendment
~~June 2011~~

1. Purpose and Need for Right-of-Way

The Applicant, UNS Electric, Inc. (UNSE) is applying to expand part of the right of way to locate a 69kV isolation breaker and underbuild a fiber optic line, for internal communications, to the proposed breaker, on an existing 69kV line on Federal Lands in the Mineral Park area of Mohave County, Arizona. The isolation breaker and fiber optic line is to support the operation of the Mercator Mine's new 45MW gas-fired turbine generator.

2. Location

- a. The isolation breaker site will be located on public land identified as T. 23 N., R. 18 W., NE $\frac{1}{4}$ Section 26 as shown on Exhibit A. An as-built survey will be provided upon completion of the project.
- b. The fiber optic line will be located on the existing 69kV line on public lands identified as T. 23 N., R. 18 W., Sections 26 & 34 and T. 22 N., R. 18 W., Section 3. Arizona State Trust Land sections affected are T. 22 N., R. 18 W., Section 4. Private land sections affected are T. 23 N., R. 18 W., Section 35. Fiber line route is depicted on Exhibit B.

3. Design Factors

- a. The breaker site would be located in the NE of Section 26 adjacent to the existing 69kV line. The existing line is offset within the 50 foot right of way and there is 45 feet of usable right of way on the westerly side of the pole line. The additional right of way width needed would be a strip of land 35 feet wide by 330 feet in length, or one span length. The breaker site will be approximately 60 feet wide and 120 feet long. This area includes metering equipment for the 69kV line serving the Mercator Mine. This area will be graded and fenced. Concreted foundations will be constructed for placement of breaker equipment. A ground grid will be placed on site and three feet outside the fence boundary. The chain

link fence will have cad-welded connections to the ground grid installation to protect the fence from accumulating an electric charge from the lines and equipment. Two driveway access points will be constructed from Mineral Park Road to provide access to the site. The driveways will be constructed to meet County specifications for all-weather access. New 69kV poles will need to be placed to reroute the existing line to tie into the new breaker site. The old poles will not be removed as they provide an emergency alternate connection to the mine if there is a problem with the breaker.

- b. Fencing, welding, concrete work, grading, permanent foundations, and road building will be expected on Federal Lands in order to construct the breaker site. The pole line and fiber optic installation will not require these types of activities.
- c. Soils and geology in the area are suitable for placement of the power line and isolation breaker site.
- d. The fiber optic line will be strung on 12 foot wooden or fiberglass cross arms that will be replacing the existing distribution conductor connections. See attached Exhibit C for 69kV pole design. The 24 count ADSS fiber line will be under-built on existing 69kV poles. Some poles may need to be replaced to allow NESC ground clearance requirements.

4. Additional Components

- a. Any equipment storage areas will be located on private land.
- b. The isolation breaker is needed to provide operational protection to the UNSE system interconnection that will connect the new gas-fired turbine generator being constructed by the Mercator Mine. The breaker site will also include a new metering point for the mine. The existing metering point on mine property will be removed.
- c. The fiber optic line is to provide internal communications and control to the breaker equipment by UNSE operations. A fiber line will be built from the mine to the breaker site and this segment will be owned and operated by the mine.

5. Government Agencies Involved

- a. A Mohave County road permit will be applied for once a BLM permit is acquired and a construction schedule has been determined. Typically, the time to acquire this permit is about 1 week. This time frame may be longer for the driveway access point to the new breaker site.

- b. An Arizona State Trust Lands application has been filed to allow for the installation of the fiber optic line. UNSE will endeavor to have this permit fast-tracked or get permission to install the fiber line before the standard application processing time of 12 months.

6. Construction of Facilities

- a. Breaker site construction will begin once all equipment has been received from suppliers. The site will be cleared of vegetation and graded. The ground grid will be placed at a depth of 18 inches with connections above ground for bonding the fence and utility facilities to the ground grid. Foundations will be dug and concrete poured for the poles and equipment within the site. A seven foot chain link fence with razor wire will be installed along the perimeter. Two 16 foot gates in the fence will match the new driveways to Mineral Park Road.
- b. The existing hip bracket attachments for the distribution line will be removed. The fiber optic line will be strung on new 12 foot wooden or fiberglass cross arms. Note: The appearance of the fiberglass at street level will be the same as wood arms. The fiber line will be pulled into a bracket by a p-line then pulled from a cable trailer. The fiber will be terminated at the breaker site.
- c. It was determined to place the fiber line in an underbuild position rather than bury the line because of soil disturbance and cost. The existing pole heights dictate a particular cross-arm configuration to install the fiber optic line as underbuilt. This configuration has raptor protection issues so phase covers will need to be installed on the cross-arms to create a raptor proof design. The placement of phase covers is depicted on Exhibit C-1. This option was deemed more cost effective than replacing each pole with a much taller structure to meet another raptor proof design. Note: The cost of installing a taller pole is approximately \$7500 while the cost of placing phase covers, 2 per pole, would be \$200.
- d. Vegetation such as cactus, Joshua trees, yucca, will be avoided where possible and transplanted if avoidance is not feasible.
- e. UNSE construction crews adhere to all applicable OSHA standards. This includes personal protective equipment [PPE] and equipment operation. Documented tailboard meetings are held daily before any construction is commenced and when new personnel arrive at the work site to discuss aspects of the project and review hazards and any mitigation and safety concerns about individual tasks.

- ..
- f. Disposal of all liquid or solid waste produced during operation on this right-of-way shall be in an approved manner so it will not impact the air, soil, water, vegetation, and animals. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
 - g. UNSE shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release of spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

7. Resource Values and Environmental Concerns

- a. It is anticipated a cultural survey will be done by BLM personnel.
- b. If during construction any previously unidentified historic or prehistoric cultural resources are found, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery, and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or

criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

- c. It is anticipated biological evaluation will be done by BLM personnel.

8. Stabilization and Rehabilitation

Disturbed areas around the poles and guy anchor assemblies will be raked to scarified and allow natural seeding to occur.

9. Operation and Maintenance

A service truck will be dispatched to investigate outages on an as-needed basis. Typically to determine the cause of a line outage if such occurs.

10. Termination and Restoration

Upon termination of the right-of-way, all improvements will be removed within ninety (90) days. Disturbed areas will be ripped to a depth of 2" to promote natural seeding.

UNSE acknowledges that in the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part 2800, including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.

EXHIBIT D

DESERT TORTOISE HANDLING GUIDELINES

1. Stop your vehicle and allow the tortoise to move off the road.
 2. If the tortoise is not moving, gently** pick up the tortoise and move it approximately 200 feet off the road to a shaded location.
 - a. **Do not** turn the tortoise over.
 - b. Move the tortoise in the direction it was traveling. If it was crossing the road, move it in the direction it was crossing.
 - c. Keep the tortoise within 12-18 inches of the ground, move slowly so as not to cause it to become alarmed.
 - d. Release the tortoise under the shade of a bush or rock.
- ** Tortoise store water in their bladder. If a tortoise becomes alarmed its defense is to void its bladder onto the captor. This could lead to dehydration of the tortoise and potentially to death.
3. Prior to moving any parked vehicle or equipment at the project site check for tortoise under the vehicles.

PLAN OF DEVELOPMENT
UNS ELECTRIC, INC. (UNSE)
MINERAL PARK CONNECT 20.8kV POWERLINE
AZAR-33296-amend
FEBRUARY 2011

1. Purpose and Need for Right-of-Way

The Applicant, UNS Electric, Inc. (UNSE) has applied for a 20.8 kV overhead distribution power line right-of-way with appurtenant facilities in the Chloride-Mineral Park area of Mohave County, Arizona. UNSE plans to install the power line to provide a power grid connection for existing homes on private land. The new 20.8kV power line will be constructed from the existing distribution line on Mineral Park Road, as permitted by AZAR-33296, and will connect to an existing UNSE line on private lands.

2. Location

The power line will be located on public land identified as T. 23 N., R. 18 W., Section 34, Gila and Salt River Meridian, Mohave County, Arizona as shown on Exhibit A. Private land sections affected are T. 23 N., R. 18 W., Section 27.

3. Design Factors

- a. The 20.8kV power line would be located in a ROW 25 feet wide, 4,788.67 feet long and consist of approximately 20 wood poles, 45 foot tall class 3 [with 6.5 feet of said length buried in the ground]. The ROW on Federal land would be 25 feet wide and 2,845 feet long consisting of 1.63 acres and would include 10 poles and two guy anchor assemblies. The power line will be designed to be raptor proof as shown on Exhibit B -- pole configuration. Non-specular #2ACSR conductor will be used. Spans will be approximately 325 feet long and ground clearance will meet or exceed National Electric Code clearance requirements with the lowest of the wires will be a minimum of 18 feet above ground level.
- b. Soils and geology in the area are suitable for placement of the power line.
- c. No fencing, welding, concrete work, grading, permanent foundations, and road building is expected on Federal Lands. The poles will be laid out in the existing bladed roadway- Old Boulder Dam Highway [see permit AZA-32476]. This existing road right of way will be used for access to the new line. Periodic access to the pole line will be required for maintenance. Installation should be completed within thirty (30) days .

4. Additional Components

- a. The private property owners in Section 27 are currently being fed by an existing electric power line that runs south from Chloride along the Cerbat foothills. This existing line was permitted under AZPHX.-34352 and is scheduled to be taken down because of extreme age and severe terrain constraints for maintenance. This proposed project will allow the residents to be fed by a newer line that has easier maintenance access.
- b. Therefore, a connection needs to be made to from the existing line paralleling Mineral Park Road in Section 34 to an existing pole on the Old Boulder Dam Highway in Section 27.
- c. An additional underbuild segment of 329 feet and an associated guy anchor assembly will need to be constructed on the Mineral Park Road segment to create a line design configuration for the new line to tap off of in Section 34.
- d. Any equipment storage areas will be located on private land.

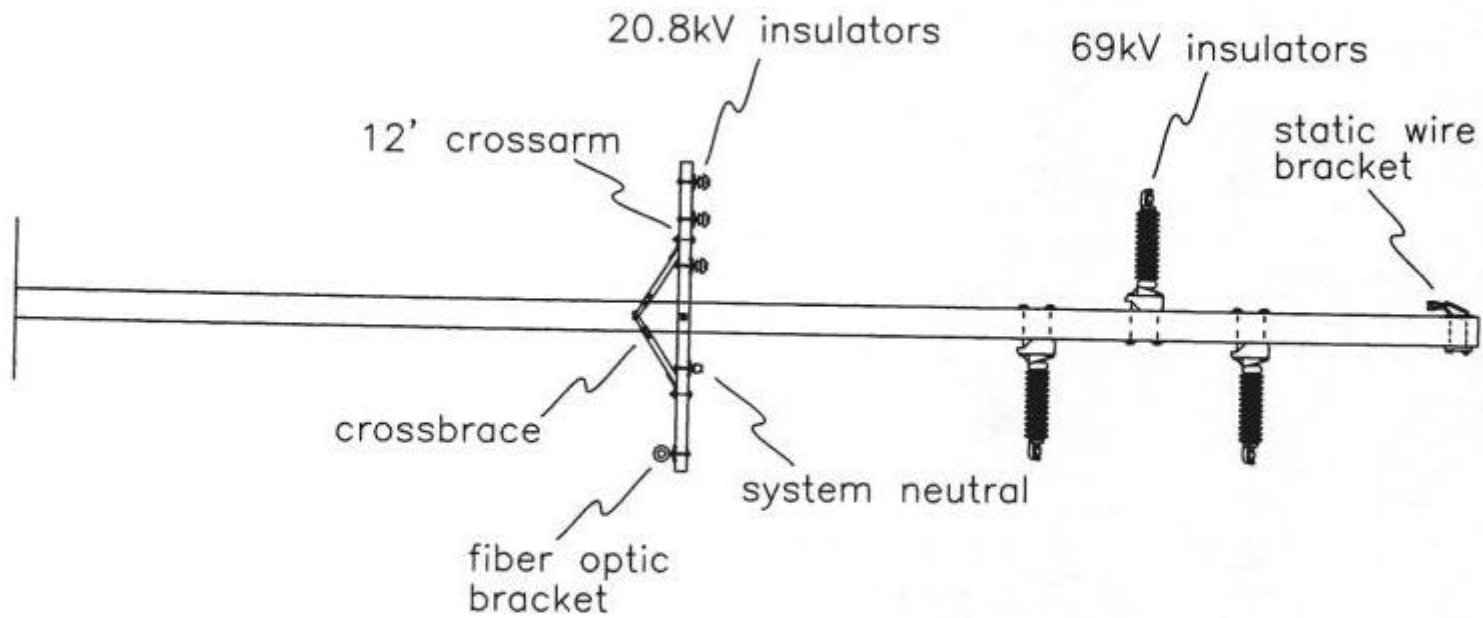
5. Government Agencies Involved

- a. A Mohave County road permit will be applied for once a BLM permit is acquired and a construction schedule has been determined. Typically the time to acquire this permit is less than 1 week. .

6. Construction of Facilities

- a. Once all permits and easements have been acquired, the job will be released to construction. The construction process will take approximately thirty days. A digger truck will be used to auger the holes, 6.5 feet deep and 24" in diameter. The holes will be covered by a wood platform (ends from empty conductor reels) until the poles are placed in them. A line crew will attach the necessary hardware to the poles, and then place the poles, tamping the loose dirt around the poles to secure them. The conductor wires will be strung and tensioned and the connections will be made at a junction points on the existing power lines.
- b. The construction crew will consist of a digger truck with 2 personnel. The line crew typically consists of one large bucket truck and a standard pickup truck. Both the digger truck and bucket trucks are 10 wheeled vehicles with 2 rear dual axles. No backhoe is anticipated unless rock is encountered. A rubber tired flatbed trailer with conductor reels attached will be used to string the necessary wires. If vehicles are used from out of the local area they will be power washed to reduce the spread of noxious weeds.
- c. Vegetation such as cactus, Joshua trees, yucca, will be avoided if possible and transplanted if avoidance is not feasible.

EXHIBIT C



TAILBOARD					STATE	DISTRICT	TASK NO.
DISCUSSED JOB: <input type="checkbox"/>						KINGMAN	
FOREMAN'S SIGNATURE					COUNTY	DETAIL MAP NO.	WORK ORDER NO.
					MOHAVE		

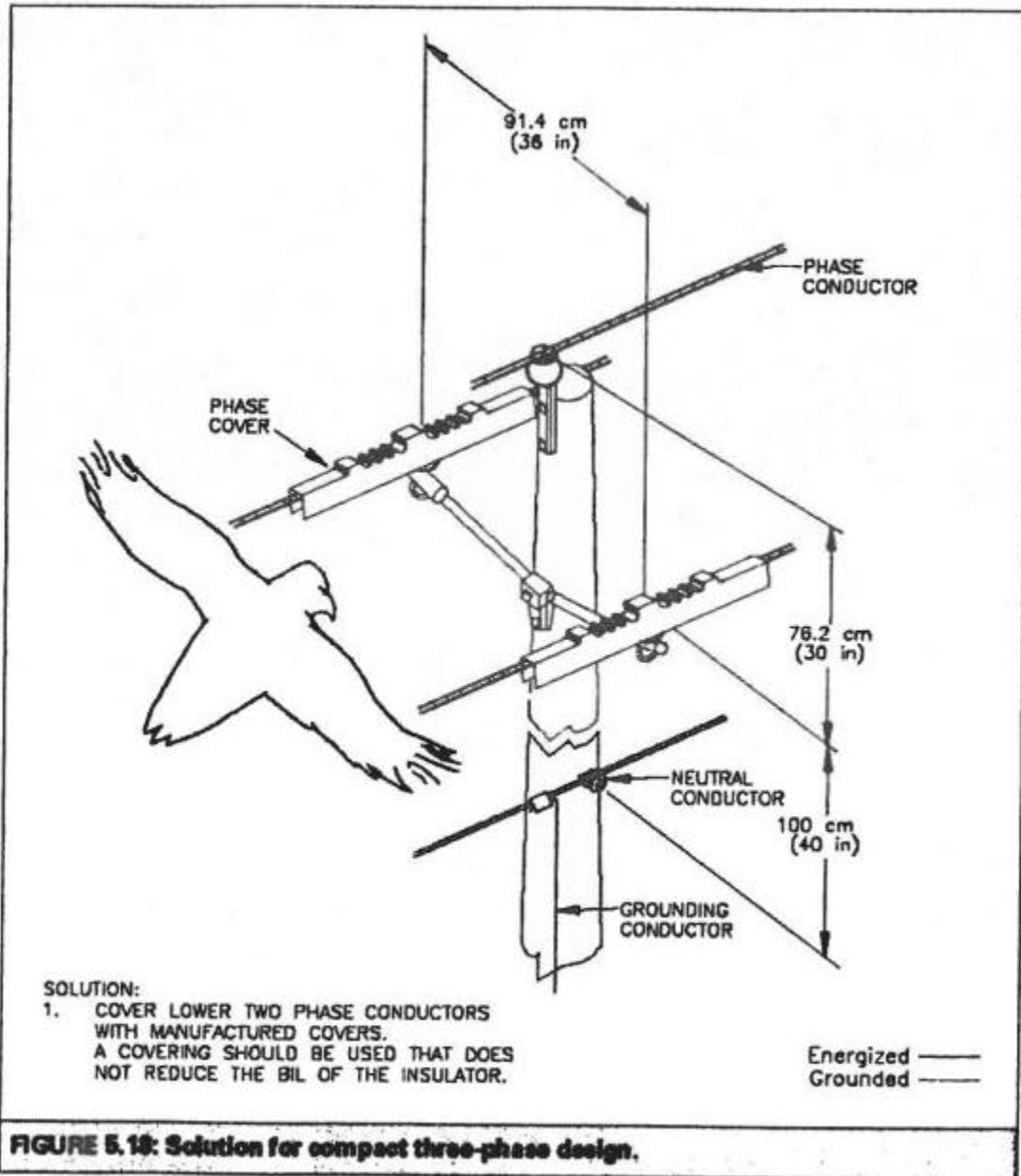


Exhibit C-1
Phase cover diagram

